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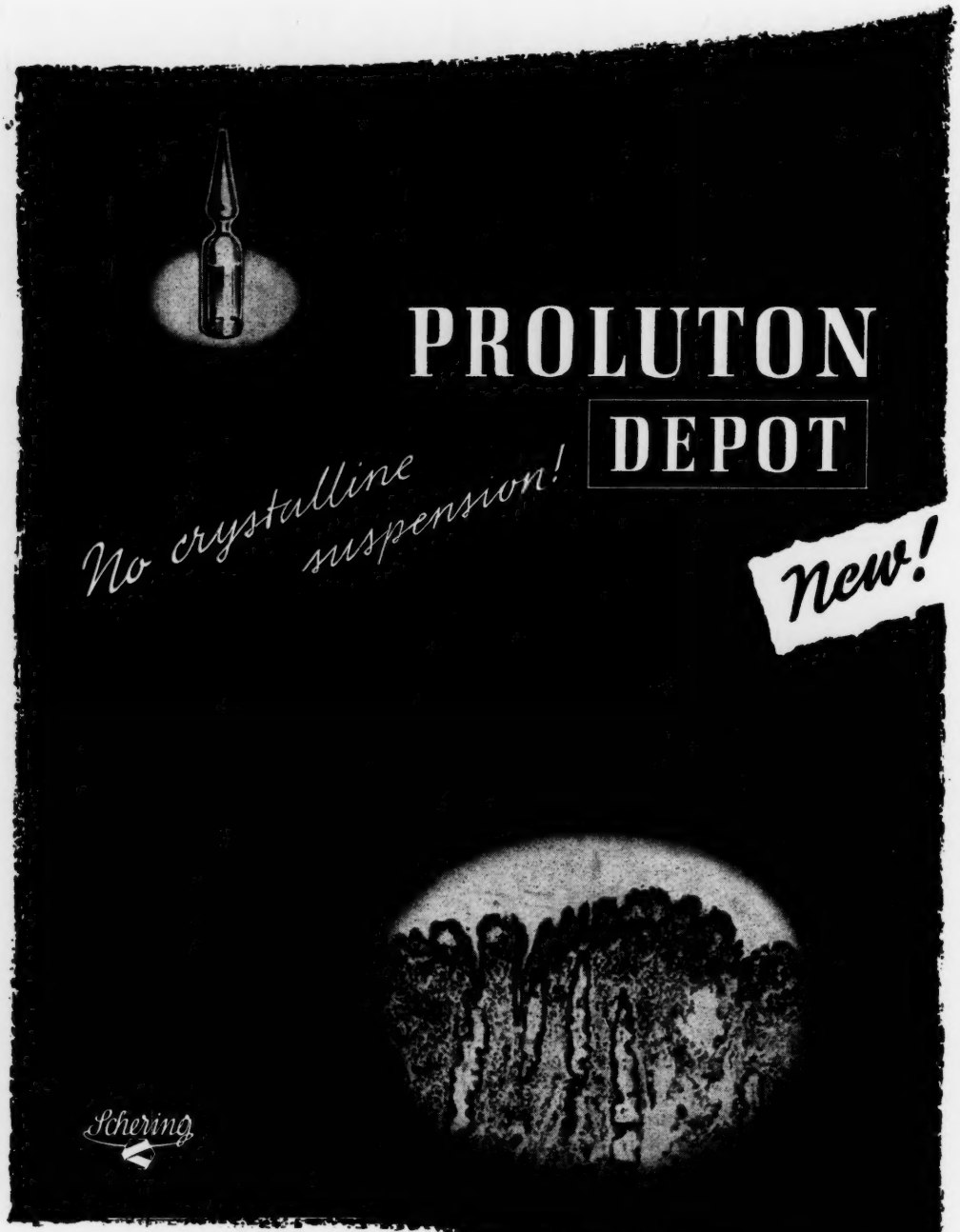

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The Sir Henry Simpson Newland Oration.[1]

WORLD MEDICAL PROBLEMS.

By LOUIS HOPEWELL BAUER, A.B., M.D., F.A.C.P., F.A.M.,
Secretary-General, The World Medical Association.

THE honour of being asked to speak before the Australasian Medical Congress is an outstanding one, but, in addition, to have been designated to give the Sir Henry Simpson Newland Oration not only makes it a dual honour but a somewhat overwhelming one.

Sir Henry Newland is an outstanding member of the medical profession, not only in Australia, but in the world. Doctors of his stature have generated the respect in which the medical profession has been held in the past, and it is only by following in the footsteps of his integrity, his ethical principles, his devotion to medical science and his ideal of service to the public that we shall maintain the medical profession in a position of respect and confidence in the eyes of the public.

I am to discuss with you today "World Problems in Medicine". All doctors are aware of the problems of medicine at the local and national level. But what are the world problems of medicine? How did they develop? What is being done to solve them?

Going round the world one finds that the problems of medicine are basically the same everywhere, although they may differ in degree. One also discovers that the vast majority of the doctors seem to think very much alike about the solution of these problems. Again, they may differ as to details, but not as to philosophy. We are well aware that while certain diseases may not be universal in distribution, nevertheless disease as an entity is universal. The method of approach to disease and to the care of the patient varies in different parts of the world. Disease often raises economic as well as scientific problems.

Governments have entered into the field of medical care to a varying extent. Social security bodies and so-called "sick funds" have become third parties in the doctor-patient relationship. Public health in its efforts to prevent disease has taken over, often of necessity, some of the

[1] Delivered at the ninth session of the Australasian Medical Congress (British Medical Association) on August 25, 1955.

functions of the practising physician. The ancillary services of medicine have become increasingly important both from the scientific and sociological points of view. The increased use of hospitals and their complexity have raised further problems.

The health professions have expanded greatly from their rude beginnings. Medicine was the first of the health professions to develop. Dentistry and nursing followed much later. For centuries medicine as a whole was shrouded in superstition and closely allied to magic, and it still is among some of the primitive races.

The doctor is a descendant of the leech and the barber surgeon. The nurse has developed from the untrained, uneducated and social outcast to her present high state with college background, broad education and often university degrees. Hospitals originally were inns for pilgrims which later developed into pest houses. Next, they became places for treating the sick poor. Now hospitals are complicated modern institutions with diverse departments. The public which formerly had a horror of hospitals now prefers hospital care in case of illness.

If we skip the early pages of history we shall find that progress in scientific medicine is limited almost entirely to the past hundred years and the vast majority of it to the past fifty years.

Until the beginning of the twentieth century medicine was almost entirely an art, including but little science, and almost exclusively an arrangement between the doctor and the patient. No third party intervened. It was a time-honoured tradition that the doctor took care of the indigent without charge. All medical knowledge could be largely encompassed by each doctor. But with the rapid growth of science changes took place. The development of the X-ray service and the laboratory resulted in medicine becoming increasingly scientific. Diagnosis became more complicated. As a result increased medical education became necessary. To meet the requirements of medical education, increased premedical education then became essential, for one cannot fathom the intricacies of modern medical science without a thorough groundwork in physics, chemistry, biology and mathematics. Diagnosis and treatment require in many instances complicated and expensive apparatus. A trained scientist is needed to apply and interpret the results of these tests. Progress in science has resulted in surer diagnosis, fewer complications, lowered mortality, lowered morbidity and shortened duration of illness, but there has also been an accompanying increase in the length of the training of the doctor and in expense to the patient. Medicine has not only become more of a science and less of an art, but it has tended in many areas to become only a science. This is unfortunate, for if medicine is to meet all the needs of the public it must combine art and science. In order to achieve this intricate combination the prospective doctor needs a broad academic training as well as training in the purely technical and scientific courses.

Hence the increase in science has resulted in an accompanying increase in expense, both in educating the doctor and in delivering medical services. As there are both scientific and organizational problems in medicine at the international level, I will limit my remarks to those problems of an organizational and educational nature.

What part do international organizations play in either producing or solving these problems? The answer varies with the organization under discussion.

For years there have been various attempts to establish international organizations and endow them with authority. Today there are more such organizations than can be easily enumerated, with headquarters at Geneva, Switzerland, all having some interest in medicine.

The majority of them are scientific bodies not engaged in anything except the exchange of scientific opinions and the advancement of science. There can be no objection to such bodies, and whatever they can do to further scientific progress is worth while.

There are others, however, which are involved in medical economics, medical education and political considerations. Some are governmental, some semi-governmental and some non-governmental in nature.

The International Committee of the Red Cross and the League of Red Cross Societies are the oldest international organizations dealing with medicine. Their activities are confined largely to war or disaster and as they are universally recognized I shall not elaborate on them.

One of the earliest organizations to appear on the scene in the governmental group was the Health Organization of the former League of Nations. This fell by the wayside when the League collapsed. Another is the International Labour Organization. This started with the League of Nations, but persisted independently after the League disappeared. It has arrogated to itself an increasing role in medical affairs. In my opinion it is one of the organizations most dangerous to medicine, but more about this organization later.

The organization of the United Nations resulted in the formation of three agencies dealing with health problems, namely, the World Health Organization, the Council of International Organizations of Medical Sciences, and the United Nations Educational Social and Cultural Organization. Medical affairs were largely left to the World Health Organization. The United Nations Educational Social and Cultural Organization agreed to confine its activities to the field of general education and to stay clear of medical education. The United Nations Educational Social and Cultural Organization has, however, been connected with some medical publications. Recently it gave up its interest in "World Medical Publications" in favour of The World Medical Association.

The World Health Organization became a functioning organization in 1948. Being a branch of the United Nations, it, of course, represents governments in the field of medicine. It has the governmental viewpoint and is supported by governmental funds. Problems of public health lie more particularly within the province of the World Health Organization.

The United Nations Educational Social and Cultural Organization and the World Health Organization jointly sponsor the Council of International Organizations of Medical Science. This body endeavours to coordinate the time and place of meetings of medical societies. It has nothing to do with policies.

Another organization requiring our careful watching is the International Social Security Association. While this organization claims to be non-governmental, nevertheless it was organized under the sponsorship of and is closely affiliated with the International Labour Organization. Its philosophy is entirely contrary to the philosophy of the medical profession.

There are several other organizations which in some of their aspects are of importance to medicine. For example, there are the International Committee of Military Medicine and Pharmacy and its offshoots, the Medico-Juridical Commission of Monaco, and the International Office of Documentation of Military Medicine. As these organizations are concerned in the possible establishment of a code of international medical law, consideration must be given to their activities.

In 1926 a professional organization developed, known as "*L'Association professionelle internationale des médecins*". At the initial meeting there were 23 nations present, almost exclusively from the European area. Eventually there were 14 active nations. Its purposes were to foster international cooperation, particularly among the medical profession in Europe and the British Isles. Meetings were annual, and its *Bulletin* was issued periodically. The Second World War caused this organization to become inactive.

Finally, in 1947, The World Medical Association was organized. It became the successor to the former "*L'Association professionelle internationale des médecins*", but it is organized on a world-wide basis. There are now fifty national medical associations members of it. Its original aims were:

To effect a closer liaison among the doctors and national medical associations; to protect the traditions and honour of the medical profession; to act as a forum for discussion of mutual problems; to organize an exchange of information; to represent the medical profession before other international bodies; to raise the standards of medical education and health, and to promote better international relations.

It differs from the World Health Organization in that the World Health Organization represents governments and The World Medical Association represents doctors. There is room for both organizations. There is a fairly clear line of demarcation between their activities, although there are some overlapping areas.

As already stated, public health is in the domain of the World Health Organization. Medical care should be in the hands of The World Medical Association. Medical education primarily belongs to The World Medical Association, although since government is a large factor in medical education in some countries, the World Health Organization has a lesser interest in the field.

The World Medical Association has become the only organization at the international level which can speak for the practising medical profession before other international bodies. All other bodies at that level dealing with medicine are governmental or semi-governmental in nature. Most of them have absolutely no respect for the traditions of medicine. Some of them have no consideration for the ethics of medicine. Some attack the dignity and integrity of the medical profession.

Therefore, it should be quite apparent that there are world problems in medicine aside from the purely scientific ones.

In some countries we find the whole practice of medicine under government control. In others it is more or less so controlled, and in a few countries it still remains free.

Nearly everywhere public health functions have become almost exclusively a function of government. This has been a necessary development. The protection of our food, milk and water supplies, the control of insect-borne diseases, environmental sanitation, protection against communicable disease, and vital statistics cannot be carried out on an individual basis but must be handled on a community basis. Likewise these functions often involve a police power which the individual doctor does not have or want.

When we come to medical care, however, we find the situation widely variant in different countries. The situation has become so complicated that the very freedom of medicine is at stake to a greater or lesser degree.

The development of social security is an affair largely of this century. Preceding its development was the growth of compulsory health insurance, the so-called sick funds and mutuals. The appearance of these institutions brought about a change in the method of distribution of medical care.

Before discussing some of the problems which have arisen in the distribution of medical care, let us analyse the activities of two organizations which are directly responsible for such problems.

When the United Nations was organized, the International Labour Organization, which had been in continuous existence since 1919, became one of its specialized agencies. This organization considers that in social and economic policy the "doctrine of state interference" has been widely accepted.

It justifies its actions on the Bismarckian principle that "The modern state as guardian of public health and national prosperity considers it both a right and a duty to impose compulsion . . . ."

Another principle it supports is: "Insurance is a social duty, the performance of which the State may, in the general interest, enforce."

The International Labour Organization has never sought the opinion of the medical profession on medical matters. It has sought only the opinions of government and governmental agencies. It is endeavouring to effect lay control over an increasing number of fields in medicine. Its whole history is one of the development and advancement of arrant socialism.

It is an intergovernmental agency of 69 countries, with representation from governments, labour organizations and management. It holds annual sessions at which there are four representatives from each country—two from government, one from management and one from labour.

The International Labour Office, located in Geneva, is its headquarters. It has a governing body known as the Executive Council, which consists of 40 representatives—20 from government, 10 from labour and 10 from management.

The International Labour Conference at its annual meeting adopts international labour standards which are formulated in international treaties called "conventions", or in some cases "recommendations". Member governments are supposed to submit these conventions to their parliamentary bodies for ratification. If they are not ratified within a certain period the member governments are required to report the reason.

As an indication of how the International Labour Organization ignores the medical profession, we have only to look at the reorganization of its Industrial Health Service. The director of this division is a safety engineer, who is in charge of day-to-day medical work. His control is not restricted to policies but includes technical procedures as well. The doctors in this division work in a subordinate position under this safety engineer, even in strictly medical matters. Even correspondence addressed to the medical personnel on medical subjects is answered by this safety engineer.

Under-developed countries are being given the impression by the International Labour Organization that technical medical matters can be dealt with properly by a safety engineer.

The technical assistance programme of the International Labour Organization has been tremendously expanded. Limited originally to working conditions, man-power and industrial relations, it now covers employment of so-called "experts" in social security, the latter including a complete medical care programme.

In my opinion, the International Labour Organization is not only a threat to the freedom of medicine, to adequate standards for medical care, and to the advancement of medical science, but it is a threat to free enterprise and free government. It is devoting its entire potential to the complete socialization of every nation and to the conversion of the various professions into technical labour units. I am old-fashioned enough still to believe that competition is healthy, that free enterprise stimulates progress and that freedom is the birthright of all people.

Let us now revert to the subject of the International Social Security Association. This was organized in 1927. Its objective is stated as "to coordinate internationally and strengthen efforts toward the expansion, the protection and the technical and administrative improvement of social security throughout the world". It has members in 44 countries, covering an insured population of 200,000,000 persons. Its secretariat is supplied by the International Labour Organization and its Secretary-General is appointed on the recommendation of the Director-General of the International Labour Organization.

Its 1953 meeting was devoted almost entirely to consideration of the social security institutions and the medical profession. Those appointed to study this question were laymen and no effort was made to determine the opinions or to obtain the guidance of the practising medical profession or of medical organizations. In fact, the representatives of the International Social Security Association state that when doctors are called upon to participate they speak for their associations which are opposed to the basic features of universal social security.

Next let us review some of the philosophy of this organization, which may well startle any medical group.

In 1953 the general session of the International Social Security Association adopted certain resolutions and conclusions. Some of the conclusions are so vaguely worded that it is difficult to know what they mean. The World Medical Association has called on the International Social Security Association to clarify these conclusions. For two years it refused to face the issue with The World Medical Association, but it has now finally agreed to a conference.

It would take too much time to quote all 15 conclusions, but to quote a few of them will illustrate the thinking of this organization.

Conclusion No. II reads:

> The Social Security Bodies are conscious of the importance of the collaboration of doctors. This collaboration necessary to social and medical progress is possible only if the medical profession accepts the principles on which social security is based and identifies itself with the objectives of social security.

In other words, the doctor's opinion is of no value. He has no alternative but to accept the principles of the Social Security planners.

Conclusion V states:

> The legislation should lay down the principles governing the relations between the medical profession and the social security system. The administrative bodies or associations of these bodies should ensure their implementation by agreements with the doctors or the medical association. The law should provide for compulsory arbitration or some instance competent to issue a binding decision in case of failure to reach an agreement.

Therefore, the medical profession again has nothing to say about how it will operate. Its activities are to be prescribed by legislation.

There are several conclusions which deal with methods of remuneration of the doctor, and the International Social Security Association pretends to give no opinion as to the merits of the different methods. Nevertheless, one of its spokesmen, Mr. Ulloa, goes on record as follows:

> The system of remuneration which offers the best guarantee of adequate and satisfactory medical treatment is a fixed monthly salary, which would be based on the institute's actuarial calculations. The doctor would be bound by his contract to look after the number of insured persons fixed by the institute in accordance with the need.

There seems little doubt after studying statements in its own publications that the International Social Security Association is in favour of salaried doctors completely subservient to lay control.

Conclusion XIII is as follows:

> A satisfactory medical care service is only possible if there is a rational geographical distribution of the doctors over the territory and their number corresponds to the need of the population.

The spokesmen for the International Social Security Association are openly in favour of a compulsory distribution of doctors and, if necessary, the importation of doctors from other countries.

Mr. Ulloa has stated:

> In its struggle to organize and extend social medicine, social insurance tends to demand that the doctors renounce their freedom to choose the place and the manner in which they shall practise their profession. It also demands that they shall give treatment in accordance with methods established as being the best possible within the framework of social medicine. Social security also comes between the doctor and the patient by eliminating, or at least limiting the free choice of doctors. This point has been the subject of an intense campaign against social insurance.

In other words, the doctor should give treatment which is in the best interests of the social security system and not necessarily in the best interests of the patient. This systems frowns upon the free choice of doctor.

The International Social Security Association also recommends legislative regulation of the production and sale of pharmaceutical articles and control of their prices. Many social security bodies limit the doctor to prescribing strictly within the limits of a set formulary, frequently established without the benefit of his advice.

The Right Honourable Sir Earle Page has stated with reference to this:

> . . . human disease cannot be overcome by mass treatment. Successful treatment of the individual will not be effected merely by the exhibition of a stock drug or some set formula of treatment.

If one studies the proceedings of the last International Social Security Association Assembly, *plus* the remarks of its active spokesmen, there seems no doubt that if the objectives of that body were attained in their entirety all medical and professional care would be administered through the social security organization; doctors, dentists, pharmacists, laboratory experts and research personnel would be hired to service the social security programmes. Private practice would cease to exist. The social security organization would have legislative power to distribute and allocate the personnel of the medical care services. The International Social Security Association would even modify medical education to produce a personnel especially trained in the philosophy of the social security bodies.

While we shall await with interest any clarification that the International Social Security Association may make of its conclusions, it would seem to be self-evident that even under the most favourable interpretation, unless the trend of this organization is checked, the nature of the practice of medicine will be affected all over the world.

The International Social Security Association would do well to consider the following statement made by the Right Honourable Sir Earle Page:

> In the last analysis, all medical care must be by individual doctor to individual patient. In actual fact, therefore, no real national health service can be provided without the willing and wholehearted cooperation and guidance of the doctors of the nation.

Prior to the development of social security as such, there was a long history of compulsory health insurance. This was started by Bismarck in Germany in 1883. England put it into effect on a limited basis in 1911. Practically all European and many of the Latin American countries now have a form of compulsory health insurance, either controlled or supervised by the government. In most countries it has now become tied into the social security programme.

The funds to support this system are derived in various ways. In some systems there is a payroll deduction from the employee and both State and employer contribute. In other systems the State contributes it all by means of general taxation. In some cases there is a payroll tax equally on employer and employee. These funds are supposed to pay the costs of medical and hospital care in the event of illness.

Legislation on this subject usually confers on a lay group the right to determine the character of the medical care and the method of payment. There seems to be an increasing trend to expand coverage, decrease benefits, increase costs and decrease payments to the doctor, as well as to restrict him in his treatment of the patient. Usually, following the adoption of such a system, malingering and days of absence from work increase and increase progressively. The usual method of payment is either capitation or fixed salary. Fee for service is a rarity.

The *National Health Act* of Great Britain placed medicine on an entirely new footing. Of the population, 97% are said to participate and private practice all but disappeared, but is now said to be slowly increasing again. What the final result will be on the character of medical care no one can yet predict. There are, however, two serious problems. One is the status of the general practitioner, who is entirely divorced from his patient when the patient enters the hospital, and the second is the ultimate result of this system on research and medical education.

Sweden, too, has just expanded its system to cover 100% of the population and made it entirely compulsory. The system has been in operation too short a time to warrant comment.

In the United States the government has played an increasing role in public health, in the care of patients with tuberculosis and mental disease, and in the care of the veterans.

General medical care, however, has so far been kept out of the clutches of government. Instead there has developed a tremendous system of voluntary insurance. Commercial insurance and casualty companies, union health centres, closed panel systems and the so-called Blue Cross and Blue Shield have all entered the picture. Insurance is of several types — hospitalization, surgical, surgical-medical, comprehensive, and so-called financially catastrophic.

There are now over 104,000,000 persons in the United States who carry voluntary insurance for hospitalization. Nearly half of these are insured through Blue Cross organizations. These are non-profit bodies sponsored by the American Hospital Association.

The policies cover the cost of hospitalization for certain periods. If the patient has a ward or semi-private accommodation, his bill for bed, board, nursing care, laboratory services, X-ray investigation, anæsthesia, operating room charges, is usually paid in full. If he is in a private room, the hospital services are paid and he is given a cash allowance towards the cost of his room.

In the medical care plans, over 89,000,000 people carry insurance against the costs of surgery. About 50,000,000 are insured against medical care in whole or in part. The plan which is most popular is the Blue Shield. These are non-profit organizations sponsored by the medical societies and known as "The Doctors' Plan". There are 71 such plans in the United States and eight in Canada. Some provide surgical care only; some provide surgical and in-hospital medical care; others add home and office care. The various Blue Shield plans have an enrolment in the United States of over 32,000,000. All plans are growing steadily and rapidly. Most Blue Shield plans have what is known as a service benefit. This means that the physicians participating in the plan (and the vast majority do) agree to accept the payment from Blue Shield as payment in full, if the subscriber's income is below a certain amount. If the patient's income is above that level, the doctor accepts the payment as an indemnity.

Commercial companies can offer indemnity plans only. Policies of both types are sold to groups and to individuals. The rate is, of course, lower for a group. All Blue Shield and commercial plans provide for free choice of doctor.

The closed panel plans offer comprehensive coverage, but the doctors are on a salary and there is no free choice of physician. There are many complaints about the service rendered by these plans. Many subscribers enrol because the plans are more comprehensive, but would prefer a free choice of doctor plan if it could be made equally comprehensive.

Coverage for long duration illness is developing slowly, but will soon be generally available. Policies of this type will cover the ancillary costs of illness, as well as the benefits of the regular contract.

The medical profession has established guides, which it feels these plans should meet if they are to offer health insurance protection.

In Canada, except in one Province, much the same system prevails as in the United States.

In South America, the systems of medical care vary widely. In Chile, for example, the doctors are full-time State employees, while in Cuba the profession is relatively free.

As a general rule, we may say that where there is no free choice of physician, or where the doctor operates on a salary or under governmental restrictions as to his service to his patients, a mediocrity of medical care develops. Abuses spring up, the incentive to provide superior medical service degenerates. Freedom of the doctor to practise medicine where he wishes and in the field of his choice against keen competition is essential, in my opinion, to the production of good medical care.

Again, I should like to quote the Right Honourable Sir Earle Page:

> Nationalisation of medicine must be resisted at all costs. Mere transfer of a problem to governmental control does not solve that problem—it may even intensify it.
>
> In any case, should not our free democratic peoples ask themselves why, when they have been able to obtain such magnificent results from our present health system, they should discard that system and attempt to sail on the uncharted sea of nationalised medicine? Surely we should have more guidance before we burn all our boats.
>
> In all medical nationalisation schemes, pressure to cover the whole field at once has led to chaos. Those most needing care often do not receive priority.
>
> The better way, surely, is to cherish and preserve our heritage of freedom and progress by moving steadily upwards, step by step, building on the solid foundations of our past achievements and maintaining the great traditions of service and intimate doctor-patient relationship.

The World Medical Association has adopted twelve principles which it feels are primary in any medical care scheme operated within the framework of social security. These principles are:

I. Freedom of choice of physician by the patient. Liberty of physician to choose patient except in cases of urgency or humanitarianism.

II. No intervention of third party between physician and patient.

III. Where medical care is to be submitted to control, this control should be exercised by physicians.

IV. Freedom of choice of hospital by patient.

V. Freedom of the physician to choose the location and type of his practice.

VI. No restriction of medication or mode of treatment by physician except in case of abuse.

VII. Appropriate representation of medical profession in every official body dealing with medical care.

VIII. It is not in the public interest that physicians should be full-time salaried servants of the government or social security bodies.

IX. Remuneration of medical services ought not to depend directly on the financial condition of the insurance organization.

X. Any social security or insurance plan must be open to the participation of any licensed physician, and no physician should be compelled to participate if he does not wish to do so.

XI. Compulsory health insurance plans should cover only those persons who are unable to make their own arrangements for medical care.

XII. There shall be no exploitation of the physician, the physician's services or the public by any person or organization.

As a basis for these principles there is a certain philosophy which varies considerably from that of the framers of social security policies. I should like to quote from a statement on the medical aspects of social security that was issued in 1952 by The World Medical Association:

> Fundamental for the success of any social security system is its psychologically correct structure. It must not allow the individual to forget that his security is primarily a matter for his own efforts. It is unwise for him to be led to believe that the state or community can take over and relieve him of his responsibilities. Any system created without due observance of this will, from the very beginning, carry within itself its own seeds of destruction.
>
> On the one hand it will tend to a steady and uncontrolled expansion at equally uncontrollable costs. These serious consequences are already seen in many countries and they will, with growing over-population and increasing average length of life, become impossible to master. The productive capacity of the country will be

so heavily burdened for the benefit of an increasing number of consumers that governments will in the end not be able to stand the cost, unless other equally or even more important fields of activity are neglected. As "social security" in many parts of the world is the political slogan of the day this may well happen—and, as a matter of fact, does happen.

The World Medical Association would finally like to point out that, everywhere in the field of social security, stress should be laid on prevention and rehabilitation. The primary aim must be to create healthy conditions of living—for example, with regard to housing, nutrition, clothing, recreation and working conditions. The higher a country's development, the less should be the need for official promotion of social security. It might well be asked whether an extensive and costly social security system really is a sign of soundness and advanced development of a country.

I believe these quotations express the philosophy of the medical profession as a whole. From my observation, it would seem to be in direct opposition to the philosophy of a Welfare State.

Let us now consider another problem which faces the medical profession from the international level, namely, international medical law.

For several years there have been attempts by certain organizations and individuals to draft a code of international medical law governing the activities of doctors in both peace and war. The World Medical Association has recorded its conviction that, at least at the beginning, this is primarily a problem for the medical profession and not for legal, lay or government bodies.

In 1953 the World Health Assembly adopted a resolution introduced by the Belgian Government relative to international medical law and comparative health legislation.

The Director-General of the World Health Organization felt that this resolution called for a study of problems relating to international medical law which would make it possible, among other things, to define the actual situation in this field, to make an inventory of institutions and of persons who could collaborate on the world level in the study of the problem, and to plan the organization of work, and that the World Health Organization could not play any but a coordinating role.

He circularized the various organizations and individuals he felt were concerned or had expressed interest in the problem and asked for recommendations.

The United Nations has now suggested that this should be the subject for interagency consideration. This would be most tragic for the medical profession and for medicine. The United Nations is not competent to handle the matter as it has no medical section except its own agency, the World Health Organization, and this is purely a governmental agency. There would be no objection to the World Health Organization making a factual survey as it intended, but to turn the matter over to the United Nations, where organizations like the International Labour Organization, the Economic and Social Council of the United Nations (ECOSOC) and United Nations Educational Social and Cultural Organization—all lay organizations—would cast the deciding vote, would be a travesty.

The development of any plan for an international medical law must be handled first by medical organizations with the universal principles of medical ethics as the basis for discussion. Only doctors are competent to agree on the universal principles of medical ethics.

The World Medical Association, through its fifty member associations, has adopted an International Code of Medical Ethics which incorporates the Declaration of Geneva. This must be the foundation of any code of law. The relationship between military and civilian physicians, the duties of civil doctors in times of war, disaster or peace, all emphasize the fact that the organizations most concerned are The World Medical Association, the International Committee of the Red Cross and the International Committee on Military Medicine and Pharmacy.

Eventually, such subjects as human experimentation and the doctor's role in biological warfare might be considered, but here again medical ethics is the basic factor.

If an International Medical Law, based on the Code of Ethics, is finally drafted by the doctors, governments will have a part to play in giving it recognition, just as they have had a part to play in accepting the Red Cross conventions.

Let us now turn to what is the basis of all fields of medicine, namely, medical education. The type and standard of this education determine the quality of the medicine that is to be practised in the future. Hence, it is not surprising that the important subject of medical education has been close to the heart of The World Medical Association ever since it was organized. In 1953 it sponsored the First World Conference on Medical Education. This was attended by over 600 participants from 62 countries representing 127 universities and medical schools. No effort was made to arrive at any hard and fast conclusions, but the conference afforded an opportunity to exchange views and to outline the procedures in vogue in different areas of the world, and it stimulated discussion on many moot problems.

It would be manifestly impossible and undesirable to set standards for the whole world, since medical education —indeed any type of education—depends largely on the specific needs, the facilities available and the economy of the country.

The proceedings of the conference have been distributed and all participating countries have been asked to study them, to report on how the ideas generated in the conference fit into their own systems, what steps should be taken to improve medical education in their respective countries, and what assistance they need.

The information correlated from these reports will be used for the Second World Conference which will be held in the United States in 1959. The general theme of this conference will be "The Training of the Doctor". Consideration of undergraduate education will be continued. In addition, certain aspects of the post-graduate period will be explored.

Often, because of the shortage of doctors in certain areas, great stress is laid on quantity rather than quality. An adequate number of doctors is, of course, important, but if a low grade of medical education is permitted in order to turn out a greater number of doctors, it is questionable if the health of the country will be greatly improved.

Rather than adopt such a plan it would be preferable to keep standards high, turning out fewer but better trained doctors and providing them with a greater number of well trained ancillary personnel.

The importance of the art as well as the science of medicine was recognized at the First World Conference on Medical Education. Some sage remarks were made, stressing the fact that to practise medicine requires not only a proper medical education but a broad academic background.

Sir Lionel Whitby, President of the conference, said:

> In all countries it is important that the medical profession, while being technically competent, should also have such intellectual and social prestige and such unquestionable integrity as to command respect in the councils of the nation, the province and the community.

He also stated:

> Because of the length and increasing complexity of medical studies the student must be grounded in chemistry, physics, and biology before being admitted to the medical faculty.

Also:

> There is evidence that there is now some poverty of mind in the finished medical and science graduates, because of lack of general education in the humanities, literature, language, history, philosophy and the arts. There is little doubt that the . . . practising doctor should understand the world in which his patients live, and should be able to approach them with a depth of understanding that can come only from an appreciation of civilized values.

Sir Richard Livingstone delivered one bit of philosophy which is particularly telling. It was in relation to what he termed the "Philosophy of the First Rate":

> An educated man knows and an uneducated man does not know what is first rate, and the best educated man is he who knows the first-rate in the most important human activities. . . . To repeat, an education which leaves us without a philosophy of life is as incomplete as one which leaves us unable to think or express our thoughts.

Dr. Victor Johnson, one of the Vice-Presidents of the conference, echoed the remarks of Sir Richard Livingstone. He stated that:

> A physician must be an educated man (or woman). He must know and appreciate what of the handiwork of man is first rate in the humanitarian, social and natural sciences. Furthermore, . . . he must not only secure but continue to seek after the first rate,—the good, the beautiful, and the true,—long after teaching and classes and assignments and examinations have receded into the past.

Time during the undergraduate period should be devoted to consideration of the social, civic and economic problems with which the doctor will be faced in practice and which, if he is to fulfil his mission, he must know how to handle.

We must not allow our universities in their training of students to forget that there is a human side as well as a technical side to medicine. Too often our young graduates have had little or no instruction in ethics or the doctor-patient relationship.

Our courses of instruction have tended to grow up without due relationship to each other. We have tended to teach in compartments and not as an integrated whole. Aside from technical instruction, the student should be trained to realize that the patient is a human being and not a case number.

Medicine, from the time of Hippocrates, has been considered a public service. It must never be considered just a means of making a living. Our educational institutions must inculcate the future generations of doctors with the ideal of service to humanity. The World Medical Association is devoted to this aim. The Association is growing slowly but steadily in size and influence. It needs the support of all doctors who believe in the freedom of medicine. You, owing to the efforts of Dr. L. R. Mallen, your distinguished member of our Council, and Dr. J. G. Hunter, your distinguished Secretary, have formed in Australia a supporting committee of The World Medical Association. A few other countries have such committees. Supporting committees can make possible many projects which otherwise the association could not afford to pursue. Your association is in the vanguard of those national member associations that are using every effort to advance the effectiveness of The World Medical Association. I am happy to say that the Federal Council of the British Medical Association in Australia is one of the most forward-thinking of our member associations.

Medicine must never be regarded as a field which is set apart from the public. Doctors from time immemorial have shunned publicity and anything smacking of politics. They have devoted their lives to the care of their patients and to scientific pursuits. This was understandable when the practice of medicine was purely an individual affair between doctor and patient. Such an attitude today, however, is no longer tenable. There are too many agencies beside the doctor and patient concerned with medical care. Too often some of these agencies endeavour to force their philosophy on doctors and patients and draft their programmes with no regard whatever for the medical profession. Health and illness provide an excellent partisan football for politicians. They find it an effective way to appeal for and to collect votes.

With the increasing inroads by government into medicine, the development of voluntary health agencies, social welfare agencies, *et cetera*, the medical profession will do well to come out of its shell and develop an interest in public relations. If it does not, it has little chance of survival as an independent profession. This appeal is made not for the medical profession but for the public which it serves. If the control of medicine passes into the hands of the laity, the level of medical care will degenerate and the public will suffer.

If the public is given an opportunity to understand the developments in medicine and the reason for the profession's programme, it will support it. Health education should be a function of the doctor and the medical society, and not that of lay agencies.

Health education is one of the greatest responsibilities and opportunities of the medical profession. The importance of the early detection of certain diseases like cancer and diabetes, the after-care of such diseases as rheumatic fever and poliomyelitis, inoculation against preventible diseases, the dangers of certain diseases and of self-medication, the deceits of charlatanism and quackery, the resources of medicine, the necessity for the protection of medical research, should all be matters of public information, and many of them require public cooperation.

It is the duty of the medical profession, through its organized societies and individual members, as well as the duty of public health and education departments, to provide adequate education for the public along these lines. In addition, it is the responsibility of the profession to see that its aims and objectives are presented to the public in the right light and that its motives are always in the public interest.

The doctor is no longer alone in the health field. In the diagnosis of disease he needs the laboratory technician; in treatment he needs the nurse, the pharmacist and sometimes the physiotherapist. In after-care he needs the nurse and often the social welfare worker and the voluntary health agency; in preventive medicine he needs the health department and the cooperation of the general public; in human ecology he needs the support of the health departments, governmental and civic agencies; in occupational health he needs the help of industry.

All together these individuals and agencies form a team. Each has his or its proper place. The doctor is best qualified to be the captain of the team. No one can take his place or offer the advice or afford the leadership which he is competent to provide. But unless he assumes that leadership, it will be taken from him.

A doctor can care for far more patients than previous generations of doctors could do. This is due to several factors. Good roads and motor transportation allow him to cover much more territory in a shorter time. Ancillary personnel can do many of the things a doctor used to have to do himself, such as laboratory work, the taking of X rays, giving intravenous and intramuscular injections. Furthermore, modern therapy has decreased complications, shortened the duration of many illnesses and lowered mortality.

While all this shows that medicine is no longer a complete and self-containing whole, the doctor-patient relationship continues to remain as important as ever and the basic principle upon which medical practice is founded.

Machines, tests and new scientific discoveries are of great value in diagnosis, but they do not replace the personality of the doctor when it comes to therapy. The confidence a patient has in his doctor is a highly important factor in treatment.

This is true in all disease, but, of course, especially so in conditions of nervous origin or with psychological adjustments or involvements. Too often the doctor who is wholly scientific brushes off the patient in whom he finds no scientific basis for the symptoms. This is the reason certain people gravitate into the hands of quacks to the detriment of their own health and the reputation of medicine. To repeat, the best physician is the one who combines the art of medicine with its science.

The advances in medicine during the past half-century have been due to research. Certain diseases, once scourges of mankind, have all but disappeared. The life span in the developed countries has lengthened. This has posed new problems in that there are more people to live long enough to develop degenerative diseases.

One man can no longer know all there is to know about medicine. He can hardly know all there is to know in a restricted field. This has resulted in specialization. A certain proportion of specialization is, of course, necessary, but in my opinion the trend away from general medicine to specialization has gone too far. This is certainly true in my own country. Experience in general medicine is an essential factor in the development of a good specialist.

There is still need for the general practitioner. Medicine will suffer if it loses him. I am not turning back the clock and calling for the old type of general practitioner, valuable as he was, but for a new type—a doctor with broad training in general medicine, with a background of education in the humanities, with a knowledge of medical economics, with the ability to advise the patient when and how to consult a specialist, and, finally, one who would be that very necessary general family counsellor in matters of health.

In the past the medical profession has been the most respected profession. It has been independent. It is the only profession or occupation that strives constantly to destroy the necessity for its own existence. Let us keep it that way.

In closing, I should like to quote Dr. Alan Valentine, one of the speakers at the First World Conference on Medical Education. In pleading for doctors to be good citizens as well as good doctors, he said:

> He [the doctor] must help democracy from becoming so materialistic, its knowledge so fragmented through specialization, its humanism so neglected or atrophied, that it fails to breed great medical humanitarians as well as great researchers and specialists. Unless medical men play their important part in elevating the spirit of democracy as well as curing the bodies of men, free society may end with no physical ills but with sick souls, empty hearts and machine minds.

FURTHER INVESTIGATIONS ON A DISEASE RESEMBLING POLIOMYELITIS SEEN IN ADELAIDE.

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As the result of a report by Pellew of a disease closely resembling poliomyelitis, virus research was carried out in five cases typically conforming to this condition. On their admission to hospital, all five patients had cerebro-spinal fluid containing no cells and a normal amount of protein. All underwent a second lumbar puncture in one week, and again no cells were discovered in any of the specimens of cerebro-spinal fluid. In two cases (III and V) the protein content had risen slightly (to 50 milligrammes per 100 millilitres).

The clinical course of the five patients was followed up over a period of three years, and is recorded below.

In the original description, the salient features of the disease were pointed out. They were as follows.

1. The condition in the early stages was indistinguishable from poliomyelitis; the patients complained of bursting headache, stiff back, stiff neck, aching limbs, pain behind the eyes, upper respiratory tract infection, mild muscle weakness, and a fever followed by lysis, over a period of three days.

2. Very frequently there was a rise of temperature between the seventh and tenth days, with a recurrence of symptoms.

3. There was persistent aching of limbs, frequently interfering with muscle reeducation.

4. Muscle weakness was mild, and eventually good recovery was achieved.

5. Psychological sequelæ were the worst disability of the disease. Such symptoms as irritability, depression, lack of concentration and emotional instability were constant.

The five cases are reviewed in two sections: first the acute phase, and secondly the subsequent course.

The Acute Phase.

CASE I.—A woman, aged forty years, gave the history of occasional headaches over a period of several weeks, with an intolerable headache on the day of her admission to hospital. Aching in the limbs was present, with vomiting, back and neck stiffness and extreme lethargy. Her temperature elevated to 101° F., had fallen to normal after four days, with clinical improvement; but on the ninth and tenth days the temperature rose to 99° F. and the patient experienced a recurrence of symptoms. Muscle weakness was found in the right deltoid and the right arm, but this was short-lived. Whilst she was in hospital she had a miscarriage, which was incidental and did not affect the course of the disease.

CASE II.—A woman, aged twenty-five years, was admitted to hospital with a history of a headache of five days' duration, becoming very severe on the day before her admission to hospital. She had fever, with a stiff neck and back; vomiting and severe aching in the limbs were symptoms. The temperature fell to normal after three days. There was a slight rise to 99° F. on the twelfth day, with a minor recurrence of symptoms. Muscle weakness was not apparent early in this case, but muscle pain was a pronounced feature.

CASE III.—A boy, aged thirteen years, gave the history that on the day before his admission to hospital he had vomited several times and had had a severe headache. Both arms and legs were aching so much that he could not move them. There was pronounced neck and back stiffness, with possible weakness of the left leg. His temperature rose to 102° F., and fell by lysis after five days, with relief of symptoms. He showed the later rise of temperature (to 100° F.) on the tenth day, with recurrence of symptoms of headache, painful muscles and malaise. Three weeks after the onset he was found to have weakened sterno-mastoids.

CASE IV.—A boy, aged sixteen years, complained of severe headache, pain behind the eyes, and aching in the arms and legs, and presented with a temperature of 101·6° F. Obvious muscle tenderness and neck and back stiffness were present. There was some minor weakness in the left thigh. The fever fell by lysis in five days, and rose again to 99° F. on the eleventh day, with, however, a complaint of minor headache only. He was found to have a weak left *gluteus medius* three weeks after his admission to hospital.

CASE V.—A blind man, aged thirty-six years, complained of five days of headache, which had become very severe on the day of his admission to hospital. Back and neck stiffness, severe muscle aching and pain behind the eyes were also symptoms. There was a mild rise of temperature to 99·2° F., with a fall by lysis in three days. Although he had no recurrence of fever, headache and pain in the legs were noticed on the tenth and eleventh days. He was found to have weakness of the left quadriceps and *gluteus medius* on the twenty-first day.

The Subsequent Course.

The subsequent history of these five patients was interesting. The patients were followed up for three years, and their clinical records all conform very much to a pattern.

CASE I.—There was very little muscle weakness, although the patient had some difficulty in using her right arm for a short time. However, muscle aching was pronounced for a year or so. Her greatest difficulty was a failure of concentration, emotional instability with depression and irritability for about two years. She is now quite well.

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CASE II.—Residual muscle weakness was minimal. The patient was discharged from hospital, fit, after three months, but muscle pain in the calves and feet remained for at least eighteen months, enough to warrant frequent resting during the day. However, she suffered attacks of depression and irritability and "hysterical" attacks for two years, which became less frequent toward the end of that period. Her lack of concentration was such that on occasions she would forget what she set out to buy in the local shops. The last report is that she has resumed a normal life.

CASE III.—This patient had some minor weakness which necessitated correction of his posture for the ensuing six months. However, he was discharged from hospital, fit, a short while after. This boy was a ward of the State, and had always been somewhat unbalanced. However, there is no doubt that psychological symptoms were aggravated by his illness. Irritability, depression, emotional instability, and difficulty in concentration were severe, and the boy is finding it extremely difficult to settle at any trade. Aching of muscles, especially in the shoulders, lasted for at least two years, tending, however, to decrease as time went on.

CASE IV.—This patient's hip weakness necessitated further treatment, and during this treatment further weakness developed in his abdominal muscles, requiring the use of a corset, which was discarded after eight months. Muscle aching in his case was particularly pronounced—so much so that he could play no sport in the subsequent years. Because of weakness of his leg, he was rejected for National Service training. Two months after his original illness he wished to sit for an examination in hospital, but owing to lack of concentration he could not do it. He suffered from depression, but very little irritability. However, after eighteen months this boy resumed his studies and achieved some success in his examination. He is now doing a university course.

CASE V.—This patient still complains of some "weakness" of his left leg, which is certainly due to muscle pain. However, a check on his muscle power in the early stage showed a definite weakness. The muscle aching continued for two years. Depression, irritability and emotional instability lasted a shorter time (about eighteen months) in his case, perhaps because he has the philosophical outlook of the blind. He is now earning his living, working in the Blind School.

Laboratory Investigations.

Material from the five cases above was examined for the presence of a virus.

At the time of the collection of the initial cerebro-spinal fluid, blood, fæces and throat washings were taken from the patients. Part of the cerebro-spinal fluid, the clot, the fæces and throat washings were stored in dry ice until a second lumbar puncture had confirmed that there were no demonstrable abnormalities in the cerebro-spinal fluid, and material from patients whose cerebro-spinal fluid had been shown to contain no cells in either specimen was discarded.

The remaining materials were stored for an average time of six weeks, until monkeys were available.

The material was then prepared as follows:

Throat washings, fæces and cerebro-spinal fluid were mixed (the cases being kept separate) and diluted to approximately 20% in 10% rabbit serum saline. The whole was centrifuged in an angle centrifuge at 5000 revolutions per minute for fifteen minutes (approximately 4000*g*). The supernatant was pipetted off, 100 units of penicillin and 100 microgrammes of streptomycin per millilitre were added, and the whole was held for one hour at 4° C. before use.

Blood clot was also ground up in serum saline and treated similarly.

The material from each case was then inoculated into a pair of young rhesus monkeys, as follows: pooled material, 0·3 millilitre intracerebrally and 0·1 millilitre intranasally, and blood clot, one millilitre subcutaneously. This procedure was repeated on three successive days. Similar inoculations were made into pairs of rabbits and guinea-pigs.

Weaned mice were used in groups of four. The pooled material was inoculated into separate groups, 0·03 millilitre intracerebrally and 0·05 millilitre intranasally. The blood clot was inoculated into further groups (0·5 millilitre intraperitoneally).

The pooled material was also inoculated (0·05 millilitre intraperitoneally) to litters of twenty-four-hours-old suckling mice, two mice from each litter being held uninoculated as controls.

All material was also inoculated into embryonated hen eggs—0·1 millilitre to the chorio-allantoic membrane of groups of tenth to twelfth day eggs and 0·25 millilitre to the yolk sac of fifth day eggs.

In the case of mice and eggs, three blind passages were carried out. In no series except those in monkeys and in suckling mice were any results of any interest observed.

Suckling mice inoculated with material from Case I died, while the controls survived; but it did not prove possible to establish a strain of C virus by passage in mice. Suckling mice inoculated with material from the other four cases showed no signs of ill health.

Monkeys.

The monkeys inoculated from Cases I, III and IV showed no ill health at any time, but both monkeys inoculated with material from Cases II and V gave evidence of illness.

One of these four monkeys had a lowered temperature (95·0° F.) on the eighth day and was sluggish; on the next day the animal was very slow and the temperature was 96·4° F. This animal was killed at this stage, and no very definite abnormalities were found at the post-mortem examination, macroscopically or microscopically.

The remaining monkeys began to show sluggishness and a subnormal temperature between the sixteenth and eighteenth days. One of them, showing some wasting particularly of the hind limbs, and being slightly tremulous, was killed on the eighteenth day.

Of the remaining two monkeys, one died on the twenty-seventh day and the other had recovered by the twenty-sixth day and remained well throughout the rest of the period of observation.

At the post-mortem examination, the only obvious abnormality was the occurrence of minute red spots along the course of both sciatic nerves in the last two monkeys. On microscopic examination, however, the changes were greater, and this was particularly so in the case of the animal which died.

Sections were taken at all levels in the brain and spinal cord, of the nerve roots, of sciatic nerves, and of cardiac and striated muscle.

In the nervous system there were no abnormalities in the brain and spinal cord. However, there were lesions in the nerve roots and in the sciatic nerves. In the nerve roots close to their point of exit from the spinal canal there was pronounced infiltration with lymphocytes and mononuclear cells, and in a percentage of the nerve fibres were found vacuoles in the myelin sheaths and axon swellings. In the sciatic nerves there were small localized infiltrations with inflammatory cells associated with exudation of a few red blood corpuscles. The only abnormality in the skeletal muscle was the presence of sarcosporidiosis in all sections from one animal; but examination of the heart muscle of the monkey which had died showed severe myocarditis with widespread infiltration mainly with lymphocytes and mononuclear cells.

Passage of a pool of brain, cord, nerve, skeletal muscle and heart muscle from these monkeys did not lead to any evidence of ill health in the monkeys so treated. A repeat inoculation with the original material caused similar symptoms in two of four monkeys, but again passage was unsuccessful.

Serological Investigations.

Investigation of paired sera from the patients for antibodies to three types of poliomyelitis virus, mumps, lympho-

cytic choriomeningitis, encephalomyocarditis, Port Augusta meningitis and leptospirosis did not suggest that any of these agents was likely to have caused disease in all five patients.

Conclusion.

The clinical condition we have described is reminiscent of that described by Sigurdsson *et alii* (1950) from Iceland. Relatively few of their patients underwent lumbar puncture, but some did have an excess of cells in the cerebrospinal fluid. In our series, owing to the presence of cases of typical poliomyelitis at the same time, absence of cells was taken as the criterion for differentiation.

As in our own series, no virus was isolated from material tested by the Icelandic workers.

The radiculitis seen in our monkeys inoculated with material from Cases II and V was reminiscent of the picture reported by Pappenheimer, Bailey, Cheever and Daniels (1951); but they were able to obtain the same picture in a second passage, although not in a third. We obtained no evidence of passage.

It is possible that we were dealing with a strain of poliomyelitis virus difficult to isolate in monkeys; but at the same time we succeeded in isolating three strains in five attempts using material from typical cases of poliomyelitis. Unfortunately, at the time of this epidemic we were not in a position to attempt isolation in tissue cultures.

Summary.

1. Five cases of the disease resembling poliomyelitis previously reported are described.

2. Laboratory investigations on material from these cases are reported.

3. No virus was isolated.

4. Possible relations of this condition to others previously reported are discussed.

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ANTIBODIES TO POLIOMYELITIS VIRUSES IN THE SERUM OF THE WHITE POPULATION OF SOUTH AUSTRALIA.

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IN South Australia, during most of the period from 1949 to 1952, poliomyelitis was epidemic. There had also been an epidemic in 1947.

The interpretation of the notifications of this epidemic was made the more difficult by a concurrent epidemic of a mild poliomyelitis-like disease (Pellew, 1951), which had epidemiological features differing from typical poliomyelitis (Jackson, 1952), and from which no virus was isolated (Pellew and Miles, 1955). Because of this it was decided that an investigation of antibody levels among the white population in the State should be undertaken, and the State Poliomyelitis Advisory Committee gave a grant to support this work.

It was decided that serum should be collected from all age groups in the Adelaide metropolitan area and in a rural centre. The rural centre chosen was Waikerie, in a Murray River irrigation area, where there had been a sharp but short-lived epidemic of poliomyelitis in August and September, 1951.

Materials and Methods.

Through the assistance of the Medical Superintendent of the Adelaide Children's Hospital we were enabled to obtain an adequate sample of serum from young children in the metropolitan area, and with the help of Dr. G. H. McQueen, of the Department of Public Health, to collect a satisfactory sample from later age groups. The enthusiastic and able assistance of Dr. R. L. Miller enabled us to obtain a very large selection of blood specimens in our rural centre, but, since in this area we were drawing on a large proportion of the available population, certain groups were necessarily not so well represented, particularly those two most difficult groups, children aged under five years and young adults.

We excluded from the survey children aged under six months, since their antibody levels can be regarded only as a reflection of maternal immunity.

The serum collected has been used both for our investigation for poliomyelitis antibodies, and also for examination for MVE antibody (Miles, 1955) and psittacosis group antibody (Dane, 1955).

Neutralization Tests.

The type II neutralization tests were carried out in mice by the technique of Paul and Riordan (1950). The tests for types I and III neutralizing antibody were performed in tissue culture by the technique of Stokes, Ames and Miles (1955) in monkey kidney cultures.

Results.

Type I.

The results of the neutralization tests against type I virus are shown in Tables I and II and in Figure I.

TABLE I.

Metropolitan Area: Type I Antibodies.

Age Group. (Years.)	Antibody Present.	Doubtful Result.	Antibody Absent.	Total.
0 to 1 ..	1	2	22	25
2 to 4 ..	6	3	16	25
5 to 9 ..	10	5	11	26
10 to 14 ..	8	1	18	27
15 to 19 ..	3	7	18	28
20 to 24 ..	5	5	18	28
25 to 29 ..	7	5	11	23
30 and over ..	13	2	10	25
Total ..	53	30	124	207

No virus isolations had been made in the Adelaide metropolitan area during the epidemic period until the end of 1951, when both type I and type II viruses were isolated in rhesus monkeys. No type III virus was isolated at this time, although this type was isolated in the eastern States.

No virus isolations were attempted in the rural area; but the serological findings for those whose blood was examined in 1953, and who had suffered either paralytic or non-paralytic poliomyelitis in 1951, suggested that type I virus was responsible for most if not all the cases in that short epidemic.

There is a reasonable parallel between the curves for type I antibody in the two areas.

In the metropolitan area there was a group aged between six months and two years, and only one of the sera from these infants was capable of neutralizing 100 $I.D._{50}$ of

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[2] This work was supported by a grant from the South Australian Poliomyelitis Advisory Committee. Mr. Ames has since died from poliomyelitis.

virus. We were unable to obtain a comparable group in the rural area.

Above this age there was a similarity in form between the two curves, the proportion of positive results being higher in the rural area in all age groups except that from twenty-five to twenty-nine years.

In both groups there was a peak in the percentage showing neutralizing antibody in the five to nine years age group (65% in the rural and 39% in the metropolitan group). The proportion of positive findings then fell to a minimum of 11% in the metropolitan fifteen to nineteen

TABLE II.
Rural Area: Type I Antibodies.

Age Group. (Years.)	Antibody Present.	Doubtful Result.	Antibody Absent.	Total.
0 to 4 ..	9	0	7	16
5 to 9 ..	24	5	8	37
10 to 14 ..	22	4	12	38
15 to 19 ..	12	2	11	25
20 to 24 ..	4	2	11	17
25 to 29 ..	7	7	13	27
30 to 39 ..	16	4	5	25
40 and over ..	16	3	6	25
Total ..	110	27	73	210

years age group, and of 24% in the rural twenty to twenty-four years age group. The rate rose again to high figures in those over the age of thirty years. These variations are most unlikely to be due to chance, and the possibilities of their being due to technical errors seem small, since the metropolitan and rural groups were not tested at the same time, sera from various age groups were tested together, and in no case were all the sera from any age group tested at the same time.

Further, we have found our results to be consistent when tests have been repeated on the same sera.

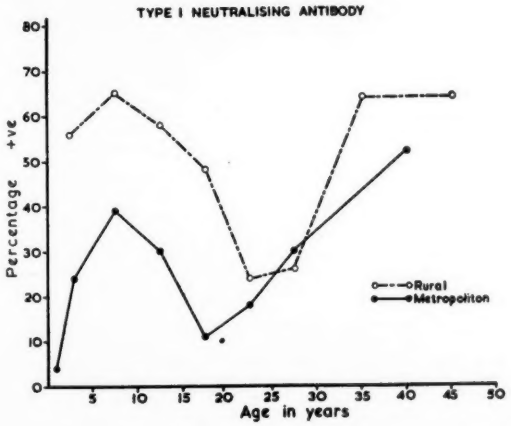

FIGURE I.

Type II.

The results of the test against type II virus are shown in Tables III and IV and in Figure II.

The results from the metropolitan area show a remarkable parallel to those for the type I antibody, with a consistently higher percentage of type II than of type I antibodies. However, there is only one group of subjects, other than those under the age of two years, in which a significantly lower proportion of positive results is found than in the remaining groups. This is the fifteen to nineteen years age group, in which five out of 28 sera were found to contain antibody. For the same reasons as those given above, it is difficult to explain this result away merely as error.

The results from the rural area were sharply different with this type of antibody. Only a small proportion of children aged under nine years had antibodies in their serum capable of neutralizing 100 mouse $L.D._{50}$ of virus. The proportion then rose abruptly, so that, except in the

TABLE III.
Metropolitan Area: Type II Antibodies.

Age Group. (Years.)	Antibody Present.	Doubtful Result.	Antibody Absent.	Total.
0 to 1 ..	9	0	16	25
2 to 4 ..	12	0	13	25
5 to 9 ..	16	2	8	26
10 to 14 ..	14	1	12	27
15 to 19 ..	5	0	23	28
20 to 24 ..	14	0	14	28
25 to 29 ..	9	1	13	23
30 and over ..	17	0	8	25
Total ..	96	4	107	207

group over the age of forty years, the percentage of positive results varied insignificantly around fifty years. In the last group there were 20 positive results out of 25 sera tested.

The possible significance of these results will be discussed later.

Type III.

As in the case of type I, the curves of type III neutralizing antibodies are substantially similar in the metropolitan and rural areas (Tables V and VI, Figure III).

In both groups there are few positive results under the age of ten years, and there is then a rise reaching a peak in the fifteen to nineteen years age group. This is substantially higher in the rural than in the metropolitan

TABLE IV.
Rural Area: Type II Antibodies.

Age Group. (Years.)	Antibody Present.	Doubtful Result.	Antibody Absent.	Total.
0 to 4 ..	4	1	11	16
5 to 9 ..	8	1	28	37
10 to 14 ..	19	2	17	38
15 to 19 ..	14	3	8	25
20 to 24 ..	8	0	9	17
25 to 29 ..	13	1	13	27
30 to 39 ..	11	3	11	25
40 and over ..	20	2	3	25
Total ..	97	13	100	210

area (15 out of 25 as against 12 out of 28). In both areas there is a fall to a very low proportion of positive results in the twenty-five to twenty-nine years ago group, the rural proportion falling even below the metropolitan (two out of 27 as against three out of 23), and then in both areas there is a small rise in the highest age group.

It is, perhaps, worthy of note that the curves of types I and III antibodies are to some extent the reciprocals of one another.

Discussion.

The results which we have reported above are considerably different from those previously reported for white populations in North America, and from our own findings for the aborigines in the Northern Territory of Australia

(Miles, 1953; Stokes, Ames and Miles, 1955); but the results reported by Snow *et alii* (1955) for a school in Perth are sufficiently similar for it to appear likely that the pattern there is similar to that for South Australia.

The results for all types in the metropolitan area and for types I and III in the rural area fail to conform to the pattern of immunization, steadily increasing with age, which has come to be expected for any endemic disease or for diseases basically endemic which have epidemic episodes. Further, the type of fall in numbers of demonstrably immune subjects in the older age groups is much greater and different in form from that shown by Paul *et alii* (1952) for type I antibodies in Cairo, Egypt, particularly in the existence of a secondary rise for all types in the age groups over thirty years.

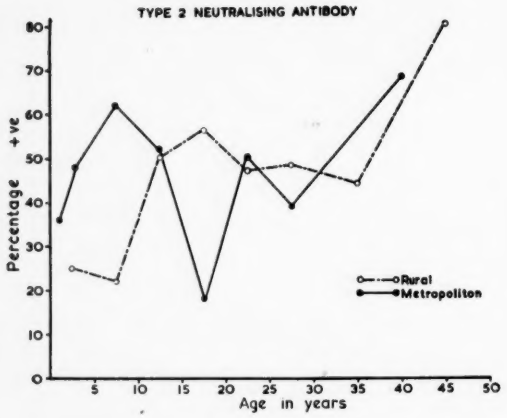

FIGURE II.

Major outbreaks of poliomyelitis have occurred in South Australia in 1937 and 1947 and from 1949 to 1952. Virus isolations were not attempted before the end of 1951, but at that time types I and II viruses were isolated. No type III strain was revealed. Serological evidence from patients who had suffered from poliomyelitis in 1951 suggests that type I was mainly, or entirely, responsible for the outbreak in our rural area. We have no record of another substantial epidemic in that area, although cases have occurred there.

TABLE V.
Metropolitan Area: Type III Antibodies.

Age Group. (Years.)	Antibody Present.	Doubtful Result.	Antibody Absent.	Total.
0 to 1 ..	0	1	24	25
2 to 4 ..	6	2	17	25
5 to 9 ..	8	1	17	26
10 to 14 ..	9	4	14	27
15 to 19 ..	12	2	14	28
20 to 24 ..	12	4	12	28
25 to 29 ..	3	3	17	23
30 and over ..	6	6	13	25
Total ..	56	23	128	207

It is, then, interesting to attempt to fit the peaks of infection to the times of occurrence of the known epidemics. In the metropolitan area poliomyelitis had been at an epidemic level for most of a period of five years up to twelve to eighteen months before the sera were collected. Types I and II viruses are known to have been present at the end of that period. There is a considerable peak in the proportion of subjects immune to both these types in the five to nine years age group, with some fall in the ten to fourteen years group and a very low level in the fifteen to nineteen years group. In the case of type I, only one child under the age of two years had antibody; in that of type II, nine out of 25 children had antibody.

The number of subjects immune to type II at all ages was higher than that of subjects immune to type I.

In the rural area there was only a peak of immunity to type I, and at almost all ages the proportion of positive findings relating to this virus was higher than in the metropolitan area. The proportion of subjects immune to type II did not rise above 25% until the ten to fourteen years age group and then maintained a level fluctuating insignificantly around 50%, except for the group of those aged over forty years.

TABLE VI.
Rural Area: Type III Antibodies.

Age Group. (Years.)	Antibody Present.	Doubtful Result.	Antibody Absent.	Total.
0 to 4 ..	5	1	10	16
5 to 9 ..	5	3	29	37
10 to 14 ..	16	5	17	38
15 to 19 ..	15	1	9	25
20 to 24 ..	4	2	11	17
25 to 29 ..	2	3	22	27
30 to 39 ..	2	3	20	25
40 and over ..	8	4	13	25
Total ..	57	22	131	210

There were no subjects immune to type III virus under the age of two years. This finding fits with our failure to isolate this type some twenty to twenty-four months before the sera were collected.

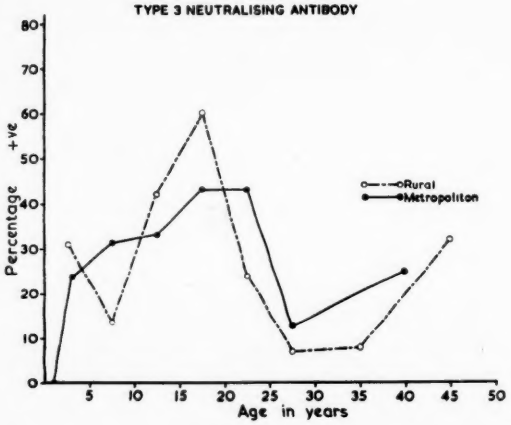

FIGURE III.

In the metropolitan area there was then a steady rise until the fifteen to twenty-four years group, and this was followed by a fall to a low level. The number of immune subjects in the rural area rose to a high peak in the fifteen to nineteen years age group, and abruptly fell in the higher groups to below 10%, only rising again in the over forty years age group.

These peaks are so closely associated with those persons who were aged naught to nine years during the 1937 epidemic period, that it seems justifiable to suggest that this epidemic was due to type III virus, and the more so when the relevant age groups have a very low immunity to type I virus and, in the metropolitan area, to type II virus.

There are, then, both in metropolitan and in rural South Australia, sharp peaks in the number of subjects immune to the various types of poliomyelitis virus; these peaks are closely associated with the times of occurrence of known poliomyelitis epidemics, and are found in groups who were under the age of ten years at the time of the epidemic period.

The tendency of the curves for types I and II viruses in the metropolitan area to be the reciprocal of that for type III tempts us to postulate that type III infection can lead to a state of refractoriness to infection with the other types, although there is not sufficient antibody present to be detected by our techniques.

However, in the case of type II, this is untrue for the rural area. The finding does not hold for our own work on the aborigines in the Northern Territory of Australia, for experimental work on monkeys, or for any surveys of immunity made in other parts of the world of which we know. Mr. G. S. Wilkinson's statistical examinations do not suggest the existence of any demonstrable heterologous immunity.

We are, therefore, led to postulate a different theory, in which we emphasize the importance of the young school child in the spread of this disease in the community.

We suggest that our findings are compatible with a theory that children are most likely to become infected with the virus at the time when they first go to school. This is suggested by the peak in the five to nine years age group when serum was collected eighteen to twenty-four months after the end of recent epidemics. Commonly these children take the virus home and infect their younger siblings. Those most liable to be thus infected would appear to be the siblings aged two years or more, who would have more contact with the older children than the youngest infants.

When a child reaches the age of ten years without being infected, the conditions, in metropolitan South Australia, seem to be such that he has substantially less opportunity of acquiring infection, at least until he has grown up, and married and is looking after young children.

We suggest that the young school children who have not yet learnt hygienic habits are very likely to become infected and to pass infection on to their fellows, but that the older children, having learnt something of hygiene, are less likely either to pass infection or to become infected.

The second peak in the immunity in the oldest age groups may be, as we have tentatively suggested, either due to the infection of parents by their young children, or a reflection of a period when the virus was commoner in the State than at present.

It is perhaps worthy of note that the immunity peaks in the rural area are higher than those for the metropolitan area, although it would appear that episodes of infection, at least with types I and III viruses, are transient. The immunity curves have the same general form. It is possible that the high infection rate during epidemic prevalence of the virus suggested by these figures may be due to the lack of any form of sewerage in our rural area.

These findings, coming as they do from a State of large size with a small population, which is to some extent isolated from its neighbours, and whose capital has a population of under half a million, may not be applicable to States with larger populations and with much larger capitals, which may well show a pattern of immunity similar to that in the United States of America. However, they do raise certain problems when any programme of mass vaccination is under consideration.

Summary.

1. Serum has been collected from samples of the population in metropolitan and rural South Australia, and tested for neutralizing antibodies to poliomyelitis viruses.

2. Antibodies to type I virus reached a high peak in both areas in the five to nine years age group, and the proportion of positive findings then fell to a low level.

3. In the metropolitan area, type II virus antibody showed the same pattern as type I. In the rural area antibody to this type was present in only a low percentage of children aged under ten years, and the proportion of positive findings first reached 50% in the ten to fourteen years age group; antibody was thereafter present in approximately the same proportion of sera tested.

4. Antibodies to type III virus were most common between the ages of fifteen and twenty-four years, and both areas had peaks within these age limits. Thereafter the proportion of positive findings fell to a low level.

5. The significance of these results is discussed.

Acknowledgements.

The authors wish to record their gratitude to Dr. E. A. Cornish and Mr. G. S. Wilkinson, of the Division of Mathematical Statistics, Commonwealth Scientific and Industrial Research Organization, for their assistance in statistical analysis of the data; to Dr. C. G. Alderman, Medical Superintendent of the Adelaide Children's Hospital, Dr. G. H. McQueen, of the Department of Public Health of South Australia, Dr. R. L. Miller, of Waikerie, and to Sister Uren, of the Institute of Medical and Veterinary Science, Adelaide, for assistance in obtaining volunteers and in collecting blood; and to all our volunteers who cooperated most cheerfully.

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IMMUNITY TO POLIOMYELITIS: AN INVESTIGATION AMONG SCHOOL CHILDREN AT COMO IN WESTERN AUSTRALIA.

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DURING the early months of 1954, the capital city of Perth in Western Australia experienced an epidemic of poliomyelitis for the second time in seven years. At the outset of this epidemic a research programme was arranged by two of us (D.J.R.S. and J.A.R.M.). Among the projects selected was the serial examination of a group of school children for evidence of changing immunity. The result of this investigation is described in the present report.

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[2] Mr. Ames has since died from poliomyelitis.

Epidemiological Background.

After many years of sporadic disease, an epidemic of poliomyelitis occurred in Perth during 1948. The attack rate was approximately 60 per 100,000 of the population, and the total number of notifications recorded was 311. Half the patients were aged under ten years, and maximal incidence was in the five to nine years age group (26%). The vast majority of all the cases notified was paralytic, the case fatality was 8%, and the proportion of survivors with residual paralysis was about 40%. The virus involved was not typed, as laboratory facilities were not available at that time.

The disease prevailed in endemic form during the next five years, with an annual attack rate of 11 or 12 per 100,000, and a second epidemic developed in February, 1954. The trend of this epidemic is depicted in Figure I. The attack rate was about 70 per 100,000 of the population, 436 notifications being registered. About 36% of all patients

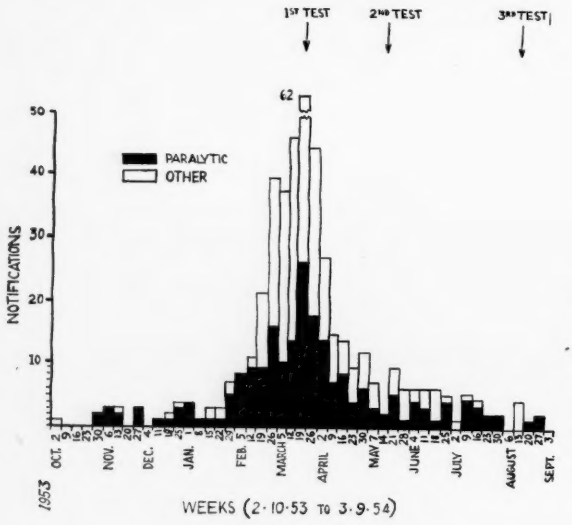

FIGURE I.

were aged under ten years, and maximal incidence was in the nought to four years age group (24%). Only 45% of all cases notified were paralytic, and the case fatality was approximately 1%. Survivors with residual paralysis comprised about 20%.

Fæcal specimens from ten of the earliest patients with paralysis, at the Infectious Diseases Hospital, were packed in dry ice and flown to Adelaide, where they were examined. Nine of these were found to contain poliomyelitis virus with the characteristics of the type I or Brunhilde strain.

Apart from its other unusual features, this epidemic was unique in that, whilst it was in progress, large crowds assembled on six successive days to witness various functions connected with the Royal visit, and that despite these increased opportunities for infection, increased incidence of disease did not occur (Snow, 1955).

Purpose of the Investigation.

It is generally believed that the number of symptomless infections vastly outnumbers those resulting in paralysis, but that both types of infection stimulate the development of immunity. In other words, the spread of poliomyelitis infection is largely a silent process associated with progressive immunization. Such subclinical immunization seemed most likely to occur in a semi-closed child community newly salted with an epidemic strain of virus. The only practicable method of detecting immunity is the examination of serum for complement-fixing and neutralizing antibodies. The purpose of the investigation therefore was to conduct serological tests for immunity on a group of school children at periodical intervals throughout the epidemic, and to find out what change, if any, took place in the relative proportion of immune subjects.

Method.

Of the several types of schools available, one which catered for all age groups from infancy to adolescence, and which represented a fair cross section of the Western Australian community, was selected. This was a State school at Como, an inner suburb of Perth. It had an enrolment of over 500 children, and two cases of poliomyelitis occurred at the school during the second week in March. A specimen of sewage was secured from the septic tank at the school and sent to Adelaide, where virus of the Brunhilde type was subsequently found in it.

The following letter was sent in the name of Dr. Linley Henzell, Commissioner for Health, through the headmaster to the parents of all the children in the school:

> A survey is being carried out, for the development of resistance to poliomyelitis, at the school which your child attends. This investigation requires a specimen of about a dessertspoonful of blood being taken from a vein in the arm, on three occasions over a period of six months.
>
> When the results have been obtained, if you allow this investigation to be made on your child, you will receive a report on his or her state of resistance to the disease.
>
> If you are prepared to allow the child to donate these blood specimens will you please fill in the form below and return it to the School Teacher as soon as possible.

Approximately one-third of all children brought back consent slips from their parents or guardians. In the two contact classes (I and V) all those children who "volunteered" were tested, while in the other classes only a few were rejected. Of the 544 children in the school, blood was taken from 166 (or 30%) at the first test, from 160 at the second, and from 163 at the third; blood was taken from 156 on all three occasions. The numbers and proportions from whom blood was taken in each of the seven classes are shown in Table I. The specimens were taken on March 17 and 18, on May 13 and on August 12. The relationship of these times to the trend of the epidemic itself has been indicated in Figure I.

TABLE I.

Class.	Approximate Ages. (Years.)	Number Enrolled.	Number Tested on All Three Occasions.
Infants	5½ to 6	104	18 (17%)
Class I (contact)	6 to 7	102	25 (25%)
Class II	7 to 8	93	16 (17%)
Class III	8 to 9	54	24 (44%)
Class IV	9 to 10	65	21 (32%)
Class V (contact)	10 to 11	72	30 (42%)
Class VI	11 to 12	54	11 (20%)
Total	—	544	145 (27%)

The specimens of blood were withdrawn into dry sterilized syringes after the skin overlying the ante-cubital vein had been cleansed with cotton swabs soaked in methylated spirit, and ejected gently into dry, sterile, screw-capped containers. After clotting had taken place, the serum was separated off, ampouled, labelled, packaged and dispatched to Adelaide by air. The first two batches of serum were stored in the frozen state at Adelaide for some five months until receipt of the third batch, when tests on all three were begun.

During the entire period of the investigation (March 17 to August 12) special record cards for all the children in the school were maintained by the teachers. These were intended to disclose the number and nature of minor illnesses occurring, and the amount of absenteeism. In addition, the medical practitioners in the area were asked

TABLE II.
Number of Children Absent from School.[1]

Class.	First Test.		Second Test.		Third Test.		Total Absent.	Enrolled.
	March.	April.	May.	June.	July.	August.		
Infants	3 (2)	6 (5)	0 (0)	6 (5)	18 (13)	0 (0)	33 (25)	104
Class I	18 (12)	16 (15)	5 (4)	31 (26)	38 (29)	10 (10)	118 (96)	102
Class II	11 (1)	10 (4)	6 (5)	31 (31)	20 (9)	14 (4)	92 (54)	93
Class III	0 (0)	4 (3)	3 (1)	9 (6)	11 (10)	7 (5)	34 (25)	54
Class IV	8 (6)	8 (7)	10 (8)	8 (5)	11 (10)	4 (4)	49 (40)	65
Class V	7 (3)	7 (7)	0 (0)	8 (5)	13 (10)	2 (2)	37 (27)	72
Class VI	0 (0)	3 (0)	0 (0)	5 (0)	8 (1)	2 (1)	18 (3)	54
All classes ..	47 (24) (8·6%)	54 (41) (9·9%)	24[2] (18) (4·4%)	98 (78) (18·0%)	119 (83) (21·9%)	39 (26) (7·2%)	381 (270)	544

[1] Figures in parentheses indicate numbers absent because of " influenza ", " common colds ", gastro-intestinal upsets and unspecified sore throats.
[2] Ten days' holidays during May; the corrected figure would therefore be 6·6%.

to notify any illness of uncertain nature which could possibly be due to the poliomyelitis virus. Upper respiratory tract infections, gastro-intestinal disturbances and unexplained pyrexia were included in the suspect category. With this aid from the teachers and the local doctors, it was thought that any undue incidence of minor illness attributable to poliomyelitis infection would be revealed, and could be usefully related to the serological findings.

The teachers were extremely conscientious in maintaining the cards, and whenever medical attention had been received the doctor was approached to find out the precise nature of the indisposition.

Laboratory Technique.

Complement Fixation Test.

The antigen was prepared from the M.E.F.1 strain of type II poliomyelitis virus kindly supplied by Dr. J. Casals, and the general technique used was that described by his team (Casals *et alii*, 1951), except that brain tissue only was used instead of brain together with spinal cord. Control serum was obtained from monkeys hyperimmunized with type II virus. The source of complement was pooled guinea-pig serum stored at a temperature of −25° C.; this was thawed rapidly on the day of use. The hæmolytic system was five minimal hæmolytic doses of rabbit hæmolysin

TABLE III.
Complement-Fixation Tests.

Class.	Number Tested.	Number of Positive Results.		
		First Test.	Second Test.	Third Test.
Infants	18	8	9	6
Class I	25	12	13	9
Class II	16	7	9	7
Class III	24	7	10	6
Class IV	21	4	10	5
Class V	30	12	10	5
Class VI	11	5	4	4
All classes	145 (100·0%)	55 (38·6%)	65 (44·8%)	42 (28·9%)

mixed with an equal volume of a 3% suspension of washed sheep red blood cells, the end point being taken as that dilution giving 50% hæmolysis. All dilutions were made in calcium-magnesium saline. The sera used in this investigation were anticomplementary, and it was found necessary as a routine to inactivate them for twenty minutes at 60° C.

A dropping technique was used, and serial dilutions of the sera under test were made, starting at a dilution of one in four. The dilutions of serum were tested with both test and control antigen. Normally two and three-quarter minimal hæmolytic doses of complement (as defined above) were used. Equal volumes of all reagents were used. Fixation was allowed to take place overnight at 4° C. After thirty minutes at room temperature on the following morning, hæmolytic system was added and the racks were placed in a water bath at 37° C. for thirty minutes. After removal from the water bath all tubes not showing complete hæmolysis were centrifuged for two minutes at 2000 revolutions per minute to deposit remaining red blood cells, and the result was then read. Tubes showing 50% hæmolysis or less were regarded as giving positive results. For the purpose of this paper all sera giving complete fixation with the test antigen, but not the control, at a dilution of 1:4 or higher, have been regarded as "positive".

TABLE IV.
Neutralization Tests.

Virus Type.	Class.	Number Tested.	Positive Results.		
			First Test.	Second Test.	Third Test.
I	Infants ..	18	5	5	7
	Class I ..	25	16	16	15
	Class II ..	16	7	8	9
	Class III ..	24	11	12	11
	Class IV ..	21	8	8	9
	Class V ..	30	14	13	11
	Class VI ..	11	6	7	6
	All classes ..	145	67 (46·2%)	69 (47·6%)	68 (46·9%)
II	Infants ..	18	8	8	7
	Class I ..	25	10	10	9
	Class II ..	16	9	9	7
	Class III ..	24	15	15	14
	Class IV ..	21	13	13	13
	Class V ..	30	10	12	9
	Class VI ..	11	6	6	5
	All classes ..	145	71 (48·9%)	73 (50·3%)	64 (44·1%)
III	Infants ..	18	5	5	6
	Class I ..	25	7	7	7
	Class II ..	16	3	3	3
	Class III ..	23	4	4	3
	Class IV ..	21	10	10	10
	Class V ..	30	6	6	6
	Class VI ..	11	5	5	5
	All classes ..	144	40 (27·8%)	40 (27·8%)	40 (27·8%)

Neutralization Test.

The type II neutralization tests were carried out in mice by the technique of Paul and Riordan (1950). The tests for types I and III neutralizing antibody were performed in tissue culture by the technique of Stokes, Ames and Miles in monkey kidney cultures.

Findings.

1. Clinical poliomyelitis was not diagnosed in any child attending the school subsequent to the first serological examination.

2. The amount of absenteeism due to illness during the period of the investigation is recorded in Table II. During the first three months of the investigation, which included two of the three blood tests, there was no marked difference in the absentee rate or in the incidnce of suspicious minor illness. However, during the latter part of June and during July, the absentee rate doubled because of an illness clinically indistinguishable from influenza. This was part and parcel of a widespread outbreak throughout the metropolitan area.

3. Poliomyelitis virus was not recovered from the septic tank at the school subsequent to the initial examination.

4. The serological findings, which are set out in detail in Tables III and IV, can be summarized as follows: (*a*) The proportions of sera which fixed complement in the three series of tests were approximately 39%, 45% and 29% respectively. (*b*) The proportions of sera giving positive results in the neutralization tests were approximately as follows: type I, 46%, 48%, 47%; type II, 49%, 50%, 44%; type III, 28%, 28%, 28%.

Discussion.

Preconceived notions are just as unwise in preventive medicine as they are in other fields, but practical people will admit that they are inevitable. So long as such notions are put to the test and the truth is disclosed, no great harm will be done. No apology is therefore necessary for stating that the findings are not only remarkable, but quite unexpected. Where a progressive increase in the proportion of immune subjects was anticipated, no such increase was found.

Several points seem relevant. First, it is possible that the investigation was commenced too late, and that the majority of those exposed became infected before the first blood test. There are several arguments against this suggestion. The investigation began within a week of clinical poliomyelitis having been detected in the school. The epidemic itself had been in progress for less than five weeks. Poliomyelitis virus was present in the school sewage when the investigation was undertaken. Finally, the sera of over half of all children tested gave negative findings. There is evidence, therefore, that virus was present in the environment of many susceptible children without serological indications of progressive infections.

Second, it is possible that the transference of infection was interrupted by the intense hand-hygiene campaign and other control measures which were instituted during the epidemic, and which have been described elsewhere. While this may have played an important part in reducing the total number of infections, it seems unlikely to be the entire explanation.

Third, it is possible that the laboratory techniques used had limitations and failed to disclose immunizing infections of minor degree.

Epidemic poliomyelitis is an exasperating phenomenon, and the result of the present investigation is as puzzling as most of the other problems associated with the disease. Nevertheless, it has at least served to show that under certain circumstances spreading immunity may not be associated with an epidemic of poliomyelitis.

Summary and Conclusions.

A serological investigation undertaken during the course of a type I poliomyelitis epidemic in Perth disclosed that 46% of children at one school had high antibody levels to type I virus, but two subsequent examinations carried out during the ensuing five months revealed little change in this proportion. It is therefore concluded that immunizing infections did not take place during the course of the investigation in the group of children tested.

Acknowledgement.

This investigation would not have been possible without the whole-hearted cooperation of the Education Department and of the headmaster and staff of the Como State School, and without the support and interest of Dr. Linley Henzell, Commissioner of Public Health for Western Australia, and Dr. J. O. Poynton, Director of the Institute of Medical and Veterinary Science, South Australia.

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Reviews.

Diseases of Infancy and Childhood. By Wilfrid Sheldon, C.V.O., M.D. (London), F.R.C.P. (London); Seventh Edition; 1955. London: J. and A. Churchill, Limited. 9" x 6", pp. 816, with 231 illustrations, 18 in colour. Price: 50s.

IT is nearly twenty years since Wilfrid Sheldon, then a comparatively young man, produced the first edition of "Diseases of Infancy and Childhood", a book that has been popular with generations of medical students ever since. The seventh edition, like its predecessors, is well written, well illustrated and easy to read. It provides the newcomer to pædiatrics with a fair description of all the conditions he is likely to encounter. Included for the first time are short sections on retrolental fibroplasia, galactosuria, methæmoglobinæmia, endocardial fibroelastosis, and Turner's syndrome, and portions of several other chapters have been rewritten and revised.

Yet, in spite of all this, it is a vaguely disappointing book. Perhaps the time has come when no pædiatrician, however experienced, can expect to deal adequately with so large a range of subjects single-handed. The author reveals in various places an old-fashioned attitude to his subject—for example, in his timid approach to infant feeding. Here we read that allowing the infant to suck at a bottle until it is satisfied "almost always leads to considerable overfeeding", and that "after twelve months, steamed white fish may be added occasionally to the midday meal and a tablespoon of scraped beef may be given". And how many people, in this year of grace, use ass's milk for babies?

Atresia of the œsophagus is to be diagnosed, not because of excess mucus in the pharynx within an hour or two of birth, but on attacks of cyanosis "repeated with each attempt at feeding". The biochemical approach to medicine is poorly handled. Renal acidosis is described as arising from the inability of the renal tubules to excrete bicarbonate when the real defect is their inability to absorb sodium and potassium. In acute nephritis with oliguria, not only is the role of potassium intoxication neglected, but one is advised to give ten grains each of potassium citrate and potassium bicarbonate, four times a day, "to thwart any acidosis". In the chapter on acute nephritis also we find the statement that "the blood pressure is often slightly raised". Fits are attributed to uræmia and not to hypertension. No mention is made of aureomycin or other broad spectrum antibiotics in the management of bronchiectasis, only the fact (known years ago) that aerosol penicillin is disappointing. Marasmus is still dealt with as though it was a disease in its own right, and a 30-page chapter is devoted to rickets and scurvy, rare diseases today.

This book will probably continue to be popular with students, but it could be greatly improved by the author's sharing the subject matter between a number of specialized writers and by more intensive revision.

The Liver and Cancer: A New Cancer Theory. By Kasper Blond, M.D., F.I.C.S., with a foreword by E. Stanley Lee, M.S., F.R.C.S.; 1955. Bristol: John Wright and Sons, Limited. 8½" x 5½", pp. 232. Price: 27s. 6d.

ORIGINAL THOUGHT is rare, and so the writings of a rebel against orthodox views should not be lightly cast aside; such a rebel Blond certainly is. Here are some of his views.

Cancer "is the morphological manifestation of a metabolic disorder of the central organ of metabolism, the liver, in its co-operation with the other organs of the intestinal tract"; "98 per cent of malignancies have relationship to the digestive organs". "The cancer problem is a quantitative problem: the greater the liver damage, the sooner does a cancer

develop"; "an uncomplicated cancer does not kill its victim, but the insufficiency of the liver does". "Diseases *sui generis* like gastritis, cholangitis, colitis, pancreatitis, etc., are morphological signs of liver failure and portal back-pressure." "Conditions favourable to both primary and secondary cancers in man are: (1) primary liver damage; (2) portal hypertension and inversion of the portal blood stream; (3) flooding of the organs with nutritional toxins; (a) direct drainage by the portal vein, (b) indirect drainage via known and unknown porto-caval shunts."

"The extrinsic stimuli used in experimental cancer of the skin are not 'cancerogenic stimuli'. They are traumatic stimuli causing hyperæmia and stasis of the blood by paralysing vascular nerves and leading to precancerous lesions of the skin or the lip; but many of these lesions are at the same time hepatopathogenic poisons causing *functio laesa* of the liver. Without the presence of nutritional toxins in the blood-stream, no cancer would ever arise at such sites."

"The accumulation in the digestive organs of toxins which are carried via porto-caval shunts to remote parts of the body, to traumatic scars, to skin or lip lesions, as well as to other hyperæmic organs such as the lungs, is the only cancer-provoking agent." "Nutritional toxins are responsible for the microchemical change of the normal somatic cells into cancer cells."

"All carcinomata, sarcomata, leukæmias, Hodgkin's disease, and other malignancies are the result of liver damage caused by defective food (malnutrition) or by chemicals added to the food (chemical compounds used for preservation of food, especially derivatives of tar), by dyes added to the food, or by parasitic infestation, by alcoholism and drugs, by infections affecting the liver such as syphilis, by x-rays and radiosensitive substances."

Intrinsic food metabolites "are carried to a well-known destination, the liver, to be assimilated and become part of the body. A damaged liver is incapable of assimilating them; therefore they are not carried away to their 'known destination' to be assimilated; they cause a great number of precancerous lesions known as gastritis, duodenitis, colitis, pancreatitis, cholangitis, proctitis, peptic ulcer, varicose ulcer, rectal ulcer, etc., with consecutive malignant transformation of the tissues".

There is no doubt that many of Blond's statements are arresting, but we consider that, for the most part, his opinions are based on inadequate evidence, and that there already exists much well-established evidence strongly opposed to many of the arguments advanced in this book.

Hospital and Community. By T. Ferguson and A. N. MacPhail; 1954. London: Oxford University Press. Melbourne: Oxford University Press. 9" x 6", pp. 166. Price: 17s. 9d.

THIS book is an important contribution to any analysis of the value of the hospital to the present-day community and could be read with profit by all hospital workers. With a growing demand for increasingly expensive hospital treatment, it becomes important to discover how best this can be applied to maintain community health. The suggestions which come from this book merit careful consideration.

The growth of hospital care in Scotland from mediæval times is briefly reviewed. In two Scottish counties with varied occupational groups it was found that one person in seven had hospital care each year. The relative contribution made by different diseases was estimated. Diseases of the nervous system and infective diseases contributed the greatest number of bed-days; the number in the former group was due largely to the inclusion of mental disorders and the number in the latter chiefly to tuberculosis. The illness requiring treatment was found to differ significantly in different social groups. Areas with overcrowded homes contributed a disproportionately large number of hospital patients.

The major portion of the book is devoted to the study of 705 male patients from four medical wards—two in teaching hospitals, two in provincial hospitals in west Scotland. In an effort to estimate the contribution of social background to illness and to discover the progress of the patient after leaving hospital, these men were seen in hospital and again three months and two years after discharge. Within three months 9% were dead, 5% had been readmitted, and 8% could not be traced. Of the remainder seen in their own homes, 10% were worse and a further quarter were not improved. Just over half were back at work, one-fifth in grossly unsuitable jobs. Return to work was more closely related to the nature of the employment and home conditions than to the estimate made by the medical staff at the time of discharge from hospital. Of those seen at three months it was considered that one-quarter had a major preventible factor in their illness; the proportion was higher for unskilled manual workers than for non-manual workers.

After two years, one-quarter of the total were dead. Two-thirds of those seen had had lasting benefit from their treatment, one-fifth had not improved, and the remainder were worse. The authors consider that improvement on these results does not lie in multiplication of costly hospital beds, but rather in more help to the patient in the transition from hospital to everyday life, in better living conditions and in the provision of work suited to the patient's physical state.

Tuberculosis: Classification, Pathogenesis and Management. By Milosh Sekulich, M.D., edited by H. Stanley Banks, M.D., F.R.C.P.; 1955. London: William Heinemann (Medical Books), Limited. 9" x 6", pp. 330, with 82 text figures. Price: 50s.

A REQUEST to review yet another book on tuberculosis caused a mild feeling of boredom. This quickly changed to lively anticipation and keen interest when it was found that the book was written by Milosh Sekulich, whose first book on the classification of pulmonary tuberculosis was the subject of a favourable review in these columns in 1953.

Close study of the present volume in no way disappoints the high expectations formed. This is not "just another" dry-as-dust book on tuberculosis. It is a live book, full of good ideas, and should be studied by everyone interested in tuberculosis and especially by those charged with the conduct of chest clinics and other institutions for the tuberculous.

Sekulich's first book was devoted almost solely to classification. The present volume adds more in support of his method, which is logical and clear-cut and covers the ground fully as regards type of disease, its extent and degree of activity. It may well prove to be the simple, yet comprehensive, classification that is needed as an international standard.

A very good account is given of the clinical features of primary and secondary types of tuberculosis, which, the author insists, must never be confused but always differentiated from one another. This is essential if clear ideas are to be formed on the fundamental principles of management of tuberculosis in all its forms, even including major surgery.

The classification and general principles of management advocated have been in practical use for several years in various London clinics and hospitals. They have been found to work satisfactorily, and have brought some order into the rather confusing subject of tuberculosis.

Details are given of a case of intra-uterine tuberculosis which is of classical interest. The discussion of this case alone makes the book worth reading. The view that no child is born with tuberculosis will need revision. An infant eight days old died of generalized tuberculosis, which almost certainly originated in the intestinal tract. When five months pregnant the mother suffered from a pleural effusion following a benign primary infection from which she recovered without special treatment.

The lesions found at autopsy in the infant suggested that the primary infection in the fœtus occurred at about the same time as the primary infection in the mother. The only reasonable explanation is that the benign primary infection in the mother was accompanied by a bacillæmia—a common occurrence in such cases—and that the unborn child became infected through swallowing tuberculous amniotic fluid. It is advised that all pregnant women who contract a benign primary infection should have chemotherapy as a preventive of fœtal tuberculosis. A case such as this no doubt is rare, but it is of very great importance from pathogenetic aspects. It is matter such as this that makes the book so well worth reading.

Daniel Paul Schreber: Memoirs of My Nervous Illness. Translated, edited, with introduction, notes and discussion by Ida Macalpine, M.D., and Richard A. Hunter, M.D., M.R.C.P., D.P.M.; 1955. London: Wm. Dawson and Sons, Limited. 8½" x 5½", pp. 430, with five illustrations.

THE case of Daniel Paul Schreber, President of a German Court of Appeal, "the most frequently quoted patient in psychiatry", first excited interest through Freud's analysis of the patient's memoirs published in 1911 under the title of "Psychoanalytical Notes Upon an Autobiographical Account of a Case of Paranoia".

Schreber's memoirs were published in Leipzig in 1903, and have now been translated into English by Ida Macalpine and Richard A. Hunter. Freud, who was the first to make

an intensive investigation into the psychodynamics of the psychoses, concluded that Schreber's psychosis was the result, and not merely symptomatic, of conflict over unconscious homosexuality, a conclusion which has often been criticized by later investigators. The first part of the book deals with Schreber's family background, the history of two earlier nervous illnesses from which he made an apparently complete recovery, and a discussion of Freud's interpretation and of various concepts of paranoid states (*dementia præcox* and paranoia). From their own experience and a survey of psychoanalytical literature Macalpine and Hunter conclude that projection of and conflict over unconscious homosexuality are not established causes of paranoid illnesses. They remind us that Freud (1911) described his theory as "more or less speculative" and "only a fragment of a larger whole". Schreber's feeling of confusion about sex identity which the authors regard as pathognomonic of schizophrenia is contrasted with the true homosexual's urges towards others of his own sex, of which he is not at all uncertain.

The translation of the memoirs, which takes up some 370 pages, offered many difficulties owing to Schreber's involved sentences and his struggles to describe what he himself admitted as inexpressable in human language, but the authors are to be congratulated on a very readable result. The reports by Dr. Weber and the judgement of the court to which Schreber appealed show how chary both Weber and the court were of assuming responsibility for Schreber's release. The book concludes with a discussion of psychodynamic and diagnostic problems raised by this fascinating case. Schreber's attitude to the neurologist Flechsig whom he consulted in the early stages of his illness, interpreted by Freud as passively homosexual or feminine, in the opinion of Macalpine and Hunter involved a reactivation of much deeper archaic unconscious levels than those suggested by Freud. This book is strongly recommended to psychiatrists who will not fail to learn something from it whatsoever may be their school of thought.

Books Received.

[The mention of a book in this column does not imply that no review will appear in a subsequent issue.]

"Cerebral Vascular Diseases: Transactions of a Conference Held under the Auspices of The American Heart Association, Princeton, New Jersey, January 24 to 26, 1954"; chairman, Irving S. Wright; edited by E. Hugh Luckey; 1955. Published for The American Heart Association, New York and London: Grune and Stratton. 10" × 7", pp. 178. Price: $5.50.

There were 34 participants in the conference.

"Heart Disease: Its Diagnosis and Treatment", by Emanuel Goldberger, M.D., F.A.C.P.; Second Edition; 1955. Philadelphia: Lea and Febiger. Sydney: Angus and Robertson, Limited. 9½" × 6", pp. 782, with 107 illustrations. Price: £6 17s. 6d.

The book is divided into five sections, covering (*a*) the normal heart, (*b*) the abnormal heart, (*c*) cardiac syndromes, (*d*) cardiac abnormalities, and (*e*) complications of heart disease.

"Breast Cancer and its Diagnosis and Treatment", by Edward F. Lewison, B.S., M.D., F.A.C.S.; 1955. Baltimore: The Williams and Wilkins Company. Sydney: Angus and Robertson, Limited. 10" × 7", pp. 490, with 181 illustrations. Price: £8 5s.

"The purpose of this book has been to sift the vast store of available information concerning breast cancer, combine it with practical precepts of clinical experience and make it available to all interested in the *total* care of this disease."

"Bone and Joint X-Ray Diagnosis", by Max Ritvo, M.D.; 1955. Philadelphia: Lea and Febiger. Sydney: Angus and Robertson, Limited. 10" × 7", pp. 752, with 398 illustrations. Price: £11.

"The purpose of this book is to describe and discuss the criteria on the basis of which a roentgen diagnosis can be established."

"Early Care of Acute Soft Tissue Injuries", by Committee on Trauma; First Edition 1954. Chicago: American College of Surgeons. 8½" × 5½", pp. 206.

Intended to act as a companion to the previously published "Outline of the Treatment of Fractures".

"The Art of General Practice: Practical Psychology of Medical Practice, Including a Section on Medical Ethics", by Leon L. Marshall; 1955. Melbourne: W. Ramsay (Surgical), Limited. 8½" × 5½", pp. 62. Price: 12s. 6d.

The book is intended to cover some of the difficulties met in ordinary general practice, and is concerned mainly with the frailty of human nature and the entanglements of the young practititioner who has given no thought to the vagaries of mankind.

"Medical Emergencies: Diagnosis and Treatment", by Francis D. Murphy, M.D., F.A.C.P., and Associate Authors; Foreword by George Morris Piersol, M.D.; Fifth Edition; 1955. Philadelphia: F. A. Davis Company, Publishers. Sydney: Angus and Robertson, Limited. 9" × 6", pp. 622, with many illustrations. Price: 82s. 6d.

The first edition appeared in 1944; in this edition several chapters have been rewritten.

"Practitioners' Conferences: Held at The New York Hospital-Cornell Medical Center", edited by Claude E. Forkner, M.D., F.A.C.P.; 1955. New York: Appleton-Century-Crofts, Incorporated. 8½" × 6", pp. 426, with many illustrations.

Seventeen subjects were dealt with and the panel participants numbered 63.

"The Genesis and Prevention of Cancer", by W. Sampson Handley, M.S. (Lond.), F.R.C.S.; Second Edition; 1955. London: John Murray. 8½" × 5½", pp. 340, with 113 illustrations. Price: 21s.

The first edition, which appeared in 1931, was discussed in a leading article in this journal on May 28, 1932. Two new chapters have been added in the second edition.

"The Diseases of Occupations", by Donald Hunter, M.D., F.R.C.P.; 1955. London: English Universities Press, Limited. 9" × 6", pp. 1062, with 438 illustrations. Price: £5 5s.

A clinical survey of all the known hazards of occupations.

"Bone and Bones: Fundamentals of Bone Biology", by Joseph P. Weinmann, M.D., and Harry Sicher, M.D., D.Sc.; Second Edition; 1955. St. Louis: The C. V. Mosby Company. Melbourne: W. Ramsay (Surgical), Limited. 10" × 7", pp. 508, with 302 illustrations. Price: £7 11s. 3d.

The authors have acted on the belief that the normal and pathological behaviour of the skeleton should be treated on the basis of biological principles.

"Psychopathology and Education of the Brain-Injured Child", by Alfred A. Strauss and Newell C. Kephart; in collaboration with Laura E. Lehtinen and Samuel Goldenberg; Volume II. Progress in Theory and Clinic; 1955. New York and London: Grune and Stratton. 9" × 6", pp. 276, with 37 illustrations. Price: $6.00.

This is one of what is intended to be a series of publications on brain-injured children. Volume I was entitled "Fundamentals and Treatment of Brain-Injured Children".

"The Medical Significance of Anxiety", by Richard L. Jenkins, M.D.; 1955. Washington: The Biological Sciences Foundation, Limited. 9" × 6", pp. 50. Price: $1.00.

Every practitioner has to deal with the problem of anxiety: this booklet is "an endeavour to aid him to deal with it wisely".

"Management of Disorders of the Autonomic Nervous System", by Louis T. Palumbo, M.D.; 1955. Chicago: The Year Book Publishers, Incorporated. 8" × 5½", pp. 186, with 23 illustrations. Price: $5.00.

One of the series of "General Practice Manuals".

"Recent Advances in Radiology", by Thomas Lodge, M.B., Ch.B. (Sheff.), F.F.R., D.M.R.; Third Edition; 1955. London: J. and A. Churchill, Limited. 8½" × 5½", pp. 368, with 182 illustrations. Price: 45s.

The first two editions, 1931 and 1936, were edited by Dr Peter Kerley.

The Medical Journal of Australia

SATURDAY, SEPTEMBER 24, 1955.

All articles submitted for publication in this journal should be typed with double or treble spacing. Carbon copies should not be sent. Authors are requested to avoid the use of abbreviations and not to underline either words or phrases.

References to articles and books should be carefully checked. In a reference the following information should be given: surname of author, initials of author, year, full title of article, name of journal, volume, number of first page of the article. The abbreviations used for the titles of journals are those adopted by the Quarterly Cumulative Index Medicus. If a reference is made to an abstract of a paper, the name of the original journal, together with that of the journal in which the abstract has appeared, should be given with full date in each instance.

Authors who are not accustomed to preparing drawings or photographic prints for reproduction are invited to seek the advice of the Editor.

THE PRACTISING DOCTOR AND THE PUBLIC.

AMONG the books received recently for review is "Public Relations in Medical Practice" by James E. Bryan.[1] This is so important and valuable a work that it has been decided to draw attention to it in the editorial rather than in the usual review columns. In British medicine the term public relations is generally used in connexion with the organized medical profession—the profession as a whole. A casual glance at the title might lead one to suppose that this book deals with the profession as a corporate body. Medical societies are certainly mentioned in it (one chapter is entitled "The Doctor and His Medical Society"), but throughout the author is concerned mainly with the practising doctor as an individual. When he deals with organized medicine, he approaches problems from the standpoint of the American Medical Association. The book is American and some of the references may not be entirely applicable or acceptable to Australian conditions. This does not matter much—the ways in which medical practice is conducted are not the same in every country and may differ in different parts of any one country. What does matter is that the ethics of medical practice are the same everywhere. Bryan has a high conception of medical ethics; he has held the privileged position of a non-medical observer all through his life. Dr. Louis H. Bauer, the General Secretary of the World Medical Association, and a Past President of the American Medical Association, explains in a foreword that Bryan is the son of a medical man and that he has been an executive secretary of a county medical society, a State medical secretary and an administrator of a "Blue Shield" plan for more than twenty years. He has thus, in Dr. Bauer's words, "come as near to absorbing and understanding the viewpoint of the profession as any nonmedical man could". Dr. Bauer also reminds us that medicine is no longer a solo affair—it involves many other agents, departments and institutions. "Medicine has become a team, and the physician must captain the team." He concludes that if the practitioner will give careful consideration to the problems presented by the author, follow those suggestions with which he agrees, and suggest better solutions for those with which he disagrees, "our public relations would soon reach a high level". With this we most heartily agree. Let us then look at some of the questions raised by him.

At the end of his introduction the author sums up the matter of public relations as between organized medicine and the individual practitioner in a way which we would expect of any devoted member of the British Medical Association. He enumerates the ways by which the corporate profession may and does prove its devotion to the community. He writes: "I can attest to their value, and I am certain that unless one has taken part personally in such activities, he can have no adequate conception of their worth." At the same time he expresses his deep conviction that all the good works he has mentioned will profit the profession little indeed unless the individual doctor is completely imbued with the attitude which makes good public relations for him inevitable and bad public relations impossible. Dealing with the personal relationship of doctor and patient, our author refers to the spiritual basis of successful practice. From his doctor the patient "hopes to gain at once a penetrating insight, a solid reassurance and a tangible healing". He looks to the doctor "for an understanding of his own inwardness beyond any self-understanding that he can achieve" without the doctor's help. The object is to create of the relationship a mutual purpose. As the interview at a consultation proceeds something important happens imperceptibly—what Carl Bingor calls "the beginning of the therapeutic situation" is created. We read that a patient talking is a patient revealing himself and that sometimes the patient reveals more by what he tries to conceal than by what he proposes to convey to his doctor. Similarly a doctor talking is a doctor revealing himself—"he had better say too little than too much and he had better choose the time and place for saying it". Bryan discusses the reassurance which the patient seeks; for this the doctor must have insight and wisdom. If he succumbs to the easy temptation to treat the patient as a child, if he relies on mere authority, untempered by human warmth and humility, the patient, recovered of his illness, may look back on it with resentment which overshadows his gratitude. A special tolerance, a unique kind of patience may often be required of a doctor if he is to establish the authority needed by him. "Effective authority . . . depends in the last analysis upon the doctor's outlook toward the world, his innate acceptance of the sacredness of human personality." One or two final points

[1] "Public Relations in Medical Practice", by James E. Bryan, with a foreword by Louis H. Bauer, M.D., F.A.C.P.; 1954. Baltimore: The Williams and Wilkins Company. Sydney: Angus and Robertson, Limited. 9" × 6", pp. 316. Price: 53s. 9d.

in Bryan's admirable discussion on the doctor must be mentioned. He quotes Dr. Francis Peabody who once said: "The secret of the care of the patient is in caring for the patient." He reminds us of the fact often discussed in these columns that patients are not cases, but people. He also insists that it takes time to practise medicine, and of importance in this regard is his quotation from the Sermon on the Mount: "Whosoever shall compel thee to go a mile, go with him twain."

In the matter of fees Bryan is in favour of a fee-for-service system, primarily because it seems to operate in the best interests of the patient—the system seems to be more in keeping with American "folk-ways" than any other system. Doctors in Australia hold the same view. One of the important conditions stated to be necessary for the survival of the fee-for-service principle is that people must be convinced that doctors do not generally abuse the privilege of setting their own fees. The fee must appear to be justified in the eyes of the patient. Mention is made of the use of a sliding scale in regard to fees. Most of us will agree that it would be a pity if the medical attendant did not show consideration for the patient who is unable to pay the usual charges. There seems to be a general impression that in the treatment of needy patients payment of a full rate of fees is insisted on oftener than it used to be. Bryan refers to the type of practitioner who charges "all that the traffic will bear". This type of action has been described by Howard Whitman as "biological blackmail" and is most reprehensible—greed is surely one of man's most deadly sins. Apropos of this readers would do well to read an article by Robert R. Newell which appeared in *The Journal of the American Medical Association* of June 4, 1955, and which bore the title "Mink Coats and Cadillacs"; the subtitle was "A Discourse on the Nutrition and Hygiene of the Soul". Neville has much to say about greed and ostentation. He makes a plea that doctors shall not choose the form of ostentation that less fortunate men have to be content with; let them rather choose instead the satisfaction, uniquely available to them, of bringing the best they have to the patient who entrusts his life to their learning and care. But this is by the way—we must return to Bryan and the question of fees. He has an interesting discussion on the virtues of an itemized account—there is much to be said for it—and on the art and science of making adjustments to medical charges.

In this chapter, "The Doctor, His Office and Staff", Bryan has something to impart about the technique of running consulting rooms ("the office" of the Americans). He points out that if it is true that the continuing personal relationship between the individual physician and the individual patient is a thing of the past, its demise is neither the wish nor the fault of the patient. He thinks that if this is true it is due largely to the atomization of medical practice by what seems to some non-medical persons to be a dangerous over-extension of specialization. The doctor needs, more than anything else, the "human touch". "Thus, though the doctor have the most beautifully appointed office in the world, the most superb equipment, the sleekest secretary—if he and she have not the 'human touch', they are nothing."

We must pass over the chapters on the doctor and his colleagues (the ethical relationship), the doctor and his community (the social relationship), the doctor and his medical society (the guild relationship), the doctor and prepaid medical care (the economic relationship), and the doctor and his hospital (the institutional relationship). Each of these is replete with shrewd observation; they will repay careful study. The last chapter, "The Doctor and Himself", must engage our final attention. Here Bryan states that the burden of the book, the *Leit-motif*, is that happy and wholesome public relations for the medical man are first and foremost a matter of attitude. He tries to analyse some of those attitudes. In regard to the doctor as an optimist he quotes Hans Zinsser as referring to "the magnificent self-corrective vitality of the medical profession" and remarks that this, "call it what you will"—self-confidence, vitality or optimism—is a tremendous factor in the almost incredible story of medical progress. On the other hand there is "the doctor as pessimist", and he quotes Dr. Gumpert that the history of medicine imposes on medical men a most difficult task—"to combine the demands of tradition with the spirit of revolution". Gumpert thinks that the doctor can fulfil his task only when he combines a great scepticism, a relentless self-criticism, with enthusiasm and confidence. Another "attitude" is the "rebellion against cooperation". Sometimes the natural and praiseworthy desire for freedom from non-professional control makes a practitioner self-centred, aggressive and immature. This, Bryan thinks, leads the practitioner to doubt the ability of non-medical people to understand their own problems and to question their goodwill towards doctors. "Such feelings as these naturally lead one away from cooperation and mutual respect." They may result in professional impotence. This may seem to be at variance with other parts of the book in which Bryan has explained that the patient leans heavily on his doctor. In that regard he has insisted on a correct attitude on the part of the doctor. If the doctor is self-centred, aggressive and immature he will naturally evoke a reaction among those before whom he displays these characteristics, especially if they are as intelligent and far seeing as Bryan himself obviously is. Bryan discusses yet another "attitude"—the decay of idealism. This is a large subject—too large for full discussion in this place. Bryan thinks that it is a good sign that a physician is keen enough to detect such a tendency in himself, as he states that some of the younger physicians do—the process in these circumstances will not go far enough to do lasting damage to the physician's essential idealism. Bryan refers to older physicians who perceive a decay of idealism among their younger colleagues, and he thinks that the elder doctors might arrange among themselves each to take under his wing a fledgling doctor, acting as "his mentor and guide, his helper and friend". This sounds fine and noble, but it is not always the younger men who manifest a loss of idealism—experiences with the Pensioner Medical Service in Australia show this abundantly. Many a young graduate fresh from graduation has his ideals rudely shattered by the spectacle of his seniors as they fall from grace. This is a matter in which every medical graduate must continually take stock of himself, lest he too "should become a castaway". Bryan

writes that only a balanced physician can restore balance to a neurotic world. Because medical practitioners "are granted the inestimable privileges of both the confessional and the laying of hands on the body of the human person", nothing less than greatness is demanded of them. "Nothing less than greatness will preserve medicine as a profession in the estimation of the people whom it professes to serve." It all depends on the attitude of the doctor toward his patient, his profession, his community, his job, and himself. Bryan has for this the appropriate "synoptic word" charity. He concludes with the words of Saint Paul to the Corinthians:

> Though I speak with the tongues of men and of angels, and have not charity, I am become as sounding brass, or a tinkling cymbal. And though I have the gift of prophecy, and understand all mysteries, and all knowledge; and though I have all faith, so that I could remove mountains, and have not charity, I am nothing. And though I bestow all my goods to feed the poor, and though I give my body to be burned, and have not charity, it profiteth me nothing. . . .

Current Comment.

WEIGHT REDUCTION.

THAT the obese patient eats more than he needs for providing energy and for replacing wear and tear is undeniably true; that to establish a negative intake balance is the way to correct obesity is equally true, but to put this remedial course into effect is not so simple. Until we know exactly why, of two people whose basal metabolism and endocrine functions are equally within normal limits, one eats enormously and remains lean and stringy, while every mouthful the other swallows "goes straight to fat", we can make no fundamentally correct approach to the problem of obesity. Nevertheless, given an overweight patient, we can prescribe a diet which will harmlessly reduce his weight. All we have to do thereafter is to see that he adheres to that diet—and therein lies the difficulty. Eating to live is a practice confined to the ascetic, the old-age pensioner and the absent-minded professor, each for his own sufficient reasons; and although living to eat is in the extreme confined to gourmets and gourmands, most ordinary people appreciate good eating. Eating is a pleasant experience much valued by the average person; over-eating short of gluttony is practised by the great majority of Australians, largely because in this lavish land there is no bar to indulgence.

To enforce diet restrictions upon the frankly gluttonous is difficult, but they may be frightened into compliance; to find for the compulsive eater, the one who nibbles and gorges to compensate for some psychological defect, a compensatory mode of expression, or a sublimation, may be harder, but not impossible; but to break down a habit of years, the pleasant, satisfying, unsinful habit of moderate overeating, in the normal person, is a task of tremendous magnitude. Except in an emergency, correct weight reduction is not a matter of a devastating dietary raid, tearing off two pounds a day for a week or two; apart from the physical dangers of such a method, there comes a stage at which will-power can do no more, and the rebound does a great deal of harm. If there is no therapeutic urgency, the ideal is for the patient to reduce slowly and regularly, say at the rate of two pounds per week, without ever feeling hungry; to maintain this, his conscience must have an ever-active spur, to keep him up to the mark. In planning restrictions, common sense is the first essential. Not only when eating with friends or in a restaurant, but more especially when at the same table as the rest of the family, nobody can weigh, measure or estimate 100 grammes of carbohydrate, 20 grammes of fat and 100 grammes of protein. The simplest instruction is to eliminate flour in all forms; thus, not only are bread, scones and biscuits lost, but butter and jam go with them, while with pies, puddings and cakes go sugar and shortening. If this is not enough, potatoes can be banned; and in spite of much indignant, and weighted, denial, alcohol is one of the most rapid fat-producers. To meet the next requirement, that the patient must never feel hungry, the most sensible expedient is to increase the bulk of his diet with enough green vegetables, raw or cooked, to fill his stomach right up. This is often not possible, and other methods have been tried with varying success. The more fibrous breakfast cereals contribute some bulk without many calories; some preparations of agar are filling without being fattening; but the usual procedure is to destroy appetite. In this connexion, a recent report by H. Sapoznik[1] on weight reduction in obesity gives the result of a clinical study in which he tested various formulæ. The one which produced the best results, without side effects, contained d-amphetamine sulphate, five micrograms, to depress hunger and overcome lassitude; phenobarbital, 16 milligrammes, to offset tension and nervousness; di-methionine, 150 milligrammes and choline bitartrate, 400 milligrammes, to exert their lipotropic action on the liver; vitamin B_{12}, four microgrammes, on the grounds that it increases the patient's sense of well-being and activity; methyl cellulose, 160 milligrammes, and magnesium stearate, 14·18 milligrammes, to give bulk and induce a feeling of satiety. Sapoznik claims that it was the inclusion of the liptropic agent which was responsible for the superiority of this mixture ("Obolip") over other formulæ containing amphetamine derivatives alone.

The final requirement is the spur to keep the patient up to the mark. Since the housewife's cooperation in planning suitable meals is essential, many doctors make the mistake of enlisting the wife as the watchdog, to keep the husband on his diet. This inevitably leads to domestic strife. The wife's part should be limited strictly to providing the required meals, and she should be prohibited from commenting or advising. The best watchdog is a pair of bathroom scales, with a card pinned to the wall above, on which once a week the patient must write his weight, himself. The stark evidence of the column of figures provides enough reproach or commendation without involving a loving wife in a charge of "nagging". These suggestions are offered because they really work.

CARCINOMA OF THE URETER.

PRIMARY CARCINOMA is not commonly met with in the ureter, which is more apt to be invaded by metastases. The common epithelial structure of the renal pelvis, ureters and bladder leads, of course, to many common features of tumours occurring at any of these three sites, and it is not unusual in text-books to find carcinoma of the ureter dismissed with a reference to the "type" tumour described more fully in relation to the bladder. Nevertheless, the ureteric neoplasm has its own features in relation to pathology and treatment. A recent study of the subject by G. F. Whitlock, J. R. McDonald and E. N. Cooke[2] brings out some interesting points, especially in relation to prognosis. It refers to 33 patients with primary carcinoma of the ureter who were treated surgically at the Mayo Clinic up to 1945. Just over half the growths were purely papillary in structure, about one-third were papillary and infiltrating, and one-sixth were non-papillary and infiltrating. About one-half were of a low grade of malignancy as determined histologically; the rest were of high grade. Most of the purely papillary carcinomata were of a low grade of malignancy, while most of the infiltrating types, whether papillary or nodular, were highly malignant, with intravenous and lymphatic involvement. At least half the papillary carcinomata were associated with, or followed by, similar carcinomata in the bladder. The non-papillary

[1] *Am. J. Digestive Diseases*, June, 1955.
[2] *J. Urol.*, February, 1955.

tumours did not show this tendency. Of the 33 cases in this series, there were 10 in which bladder tumours developed after removal of the primary carcinoma of the ureter; it is necessary, therefore, to be just as punctilious with cystoscopic checks as in cases of primary vesical growth. About two-thirds of the patients with papillary carcinoma lived for five years or more. On the contrary, only one patient with an infiltrating carcinoma lived as long as three years, and he was not cured. It is therefore apparent that the standard operation of nephro-ureterectomy is adequate for the papillary types, but insufficient for infiltrating carcinoma of the ureter. Whether more complete dissection of the regional lymphatics will improve results remains to be seen.

AIR POLLUTION.

FROM Glebe (Sydney), for instance, the sky is clear and bright, and although the bridge and the heights of the North Shore are a trifle hazy, the only real appearance of air pollution is given by the thick plumes of smoke from factory chimneys. But when one is driving down from the North Shore to the bridge, even in the early morning, the heavy stratified brown pall over the whole city is the first thing to catch the eye. Sydney is clean as cities go, and from within it does not seem to suffer from much air pollution, but a comparison with Los Angeles gives food for thought. Los Angeles is a sprawling, open city, with not nearly as heavy a smoke haze over it as Sydney has, yet figures for air pollution are well worth considering. L. B. Hitchcock and Helen G. Marcus[1] have published an article entitled "Some Scientific Aspects of the Urban Air Pollution Problem". They point out that in the Los Angeles basin, which is about 40 by 40 miles in extent, there live five million people, who operate 2,361,000 motor vehicles. Each day 58,000 tons of natural gas, fuel oil, petrol and rubbish are burned; methods of combustion are everywhere imperfect, and more than 3000 tons of pollutants are emitted daily. Nearly one-half of this amount, consisting of hydrocarbons and partially oxidized fractions of various gases, is stated to come from the operation of motor vehicles.

Air pollutants are made up of inorganic gases such as sulphur dioxide, simple organic gases such as ethylene and mercaptan, the smog gases (products of the reaction of various hydrocarbons with ozone and other oxidants), and liquid and solid aerosols. Hitchcock and Marcus collect and measure pollutants by a number of methods, mostly automatic. During bad smog days over Los Angeles the range of various substances, in parts per hundred million, is: oxidants (mainly ozone), 1 to 37; hydrocarbons, 11 to 162; nitrogen oxides, 5 to 61; aldehydes, 22 to 70; carbon monoxide, 12 to 33; particulate matter, 43·5 to 105·2 microgrammes per cubic metre; and they estimate daily damage to the leaves of special test plants as up to 62% of their area. Many of these pollutants, at these levels, are capable of causing considerable irritation to eyes, nasal mucosa and lungs. Before any scheme for control of air pollution can be put into effect, many measurements of this nature must be made not only to identify the individual pollutants, but also to trace their sources. The basic methods of control are: (i) reduction of pollutants at the source by the use of collection equipment, either chemical or physical in action, or by changing the pollutant into a less noxious form, or by altering industrial processes so that the particular pollutant is no longer formed; (ii) dilution at the source by using enough air to render the discharge unobjectionable—tall chimney stacks partly achieve this; and (iii) distribution of sources, so that wide spacing of factories prevents concentration of pollution in one small area.

Vehicle combustion products are a major source of air pollution. One gallon of petrol produces 1000 cubic feet of dry exhaust gas; 100,000 motor vehicles produce each day 280 tons of carbon monoxide, 7·7 tons of nitrogen oxides, 44 tons of unburnt hydrocarbons (at least 7% of all petrol poured into fuel tanks is lost, unburnt), 1·8 tons each of sulphur dioxide and mixed aldehydes, 0·05 ton of lead, and 1·3 tons of oil droplets as aerosols. No satisfactory methods of preventing the emission of these pollutants have so far been evolved. Possibly of importance is that a carcinogen of some potency for certain animals, benzpyrene, which occurs in cigarette smoke, is also a constituent of automobile exhaust gases.

The deaths due to smog in London last year, and similar incidents in the United States of America and France before then, are extreme examples of the ill effects of air pollution. Sydney is never likely to suffer pollution of comparable density—a rough computation suggests that Sydney would have from one-quarter to one-third of the total air pollution that Los Angeles has; but this is still not negligible. Other Australian cities are similarly placed. How much is ordinarily contributed to the incidence and severity of respiratory disease by irritation of the air passages is difficult to estimate. Certainly the damage to health through air pollution is small when contrasted with the costs of damage to buildings and materials and to crops and vegetation, but nevertheless the reduction of air pollution must be regarded in part as a medical problem.

[1] *The Scientific Monthly*, July, 1955.

HYPERTENSION.

THE fantastic complicated therapy of hypertension continues, with reports in the literature of treatment with drugs old and new. A. Agrest and S. W. Hoobler have recorded results of treatment with "Ansolysen" (pentolinium tartrate).[1] Constipation caused trouble, and it was found necessary to give up using "Ansolysen" in some cases for this reason. Usually the blood pressure was taken every half-hour for three to seven hours, with the patient lying or standing. Patients were advised to omit or reduce any oral or parenteral dose of pentolinium if just prior to taking the dose, standing motionless for one minute induced giddiness. This apparently is Professor Smirk's advice. The lowest blood pressure readings were in the afternoon. The drug was given at 8 a.m., 3 p.m. and 10 p.m. each day. A dosage of 20 to 600 milligrammes was administered daily. Results varied. A blood pressure of 250 millimetres of mercury, systolic, and 141 millimetres, diastolic, might be reduced to 174 millimetres of mercury, systolic, and 111 millimetres, diastolic, or a pressure of 233 millimetres of mercury, systolic, and 152 millimetres, diastolic, reduced to 223 millimetres of mercury, systolic, and 144 millimetres, diastolic. In general there was a reduction of blood pressure, but many of the patients had received other drugs, such as reserpine or hydralazine, or underwent operations such as splanchnicectomy. Reserpine ("Serpasil") 0·25 milligramme thrice daily was given in most cases, with benefit. Hydralazine ("Apresoline") 75 to 150 milligrammes four times daily was occasionally given with pentolinium, but results were not impressive. It is stated that congestive heart failure was controlled in nine patients out of 31 in this series; four patients with coronary occlusion were not damaged by the treatment. It is not stated what other treatment was given in congestive heart failure. Patients with angina of effort did not benefit by this treatment. Those with cerebro-vascular lesions and uræmia do not appear to have derived benefit. Blurred vision, constipation and orthostatic hypotension are mentioned as frequent side effects.

In their results Agrest and Hoobler lay more stress on the reduction of blood pressure than on the effects on general health and longevity. In any case, blood pressure during recumbency was not very favourably affected. It was thought that the effects in congestive heart failure were life-saving, but other effective means of dealing with this complaint are not mentioned. Agrest and Hoobler state that it is necessary to adjust the dosage continually to achieve the greatest reduction of blood pressure. This may be tedious to patients and doctors.

[1] *J.A.M.A.*, March 19, 1955.

This article demonstrates the present lack of scientific approach in the treatment of hypertension. "Ansolysen", reserpine, hydralazine and splanchnicectomy were used in the treatment of a great many of these patients, who spent three to seven hours a day under observation, and who tested themselves for orthostatic hypotension before each dose of medicine. What effect this had on their daily lives psychologically or physically is not very apparent. It may be that benefit is obtained by the patient from blood pressure reducing drugs, but a less complicated procedure must surely be necessary, in order to enable patients to lead fairly normal lives whilst under treatment or observation.

THE FINE STRUCTURE OF THE RENAL GLOMERULUS.

ELECTRON MICROSCOPY has afforded a new view of the fine structure of the normal glomerulus, according to findings recorded by James F. Rinehart.[1] In this report the fine organization of the glomerular loops is described and illustrated, and certain physiological implications are briefly discussed. Three elements enter into the composition of the glomerular loops—namely, an inner layer of endothelium, a basement membrane and an outer layer of elaborately organized epithelium. The lining layer of endothelium is complete and of variable thickness. The attenuated segments of endothelium are in the range of 400 angstrom units in thickness. This layer may contain a series of vesicles, giving it a pseudoporous appearance. The thicker segments of endothelium cyptoplasm also contain many small vesicles. The basement membrane proper is a structure about 800 angstrom units in thickness. It appears to possess an extremely fine porosity. Evidence is presented that the basement membrane is primarily a derivative of the endothelial cell. The elaborate organization of the surface epithelium is the most remarkable feature of fine structure revealed by the electron microscope and is, undoubtedly, importantly related to function. The epithelial cells show branching cytoplasm with terminal foot processes which are anchored to and fully surface the outer aspect of the basement membrane.

Rinehart presents a series of observations which strongly suggest that fluid is transferred across the endothelial cytoplasm via small vesicles. The basement membrane, if very finely porous, would serve as an effective filter for removal of protein. The elaborate organization of the epithelium suggests that it plays an active role in preparation of the glomerular filtrate. Evidence is presented that fluid, having traversed the basement membrane, appears at the adjoining margin of epithelial cytoplasm as a series of fine vesicles. The "sponge-like" character of portions of the epithelial cytoplasm is described. Rinehart's suggestion is that the epithelium may be hydrophilic and possess contractile properties, and so function somewhat like a contractile sponge, as a part of the complex mechanism concerned with the elaboration of the glomerular filtrate.

SYNTHETIC DETERGENTS.

THE Australian housewife has only recently had access to the modern synthetic detergents in any profusion. In general, housewives are taking rather slowly to them. The chief trouble is to convince people that the recommended small amount is enough—the tendency is to add at least four times as much, which makes their use very expensive. Another trouble is that no housewife believes that a cold solution will clean dishes properly—she still fills the sink with nearly boiling water, thereby reducing the efficiency of most detergents by an appreciable amount. If the water is only warm enough to make it comfortable for the hands in winter weather, the efficiency of the usual detergent will not be reduced. Another difficulty is that at the minimum efficient concentration, in cold water, there is very little lather. Most household detergents have a quite unnecessary foaming substance added, to give the housewife confidence in their efficacy. However, unfamiliarity and prejudice are rapidly disappearing, and it can be expected that synthetic detergents will be having very wide domestic usage shortly. George E. Morris,[1] working in the United States of America, where household detergents have had a very wide popularity for several years, discusses the incidence of "detergent dermatitis" in his practice. He points out that sulphates of alcohols, glycerols, glycols or phenol ethers, and sulphonates of alkyl benzene or alkyl naphthalene, are the effective ingredients of most detergents; for special purposes various additives and "builders" are used to reinforce their cleaning power. Thus the clothes-washing detergents contain only 20% to 30% of mixed sulphates and sulphonates, with 30% to 40% of sodium phosphates; carboxymethylcellulose to prevent re-depositing of suspended dirt, and fluorescent dyes to give enhanced whiteness, are also added. The fine-fabric detergents contain sodium sulphate and sodium chloride up to 70%. Only a few special-purpose products, such as shampoos, are composed of the synthetic bases alone, or of these and soaps. In most detergents, therefore, there may be several substances which can cause sensitization and dermatitis, and when one detergent gives trouble, changing to another may solve the problem. Morris states that figures in his practice indicate that he sees no more cases of dermatitis due to detergents than he used to see when old-fashioned household cleansers were used exclusively. He states that the fine-fabric detergents cause much less trouble; and although they may be a little dearer, changing to their use, in cold water, for all purposes is often enough to prevent further dermatitis. He considers that hot water considerably increases the irritating power of the new detergents, and that the use of cold water is important. For protection, he recommends wearing white cotton gloves covered with rubber gloves. He does not discuss treatment, but the ingredients which may cause dermatitis are not particularly complex, and ordinary measures are usually adequate.

[1] *Arch. Path.*, April, 1955.

ARTIFICIAL BLADDER: A NEW OPERATION.

AN entirely new kind of operation for the diversion of urine by anastomosing the ureters to the isolated rectum has been devised by O. S. Lowsley and T. H. Johnson.[2] This is a clean reservoir under such conditions, and in addition there is no risk of general absorption of urine ingredients, with consequent dangerous alteration in the blood chemistry. The upper end of the rectum is sutured and closed finally after diversion. A new rectum (for fæces) is formed by mobilizing the sigmoid colon sufficiently to permit its being pulled through the perineal floor immediately anterior to the original anal canal, but through the same external sphincter of the anus. The latter muscle thus encircles both openings; and the operation allows complete separation of urinary and fæcal streams, together with voluntary control of each outflow. The patient is not worried by an artificial anus in an unnatural site, and total cystectomy may be performed if indicated. Bowel preparation is carried out with phthalyl-sulphathiazole and neomycin, and one hour before operation the lower part of the bowel is flooded with 1% neomycin solution through a catheter. The first two patients operated on by this procedure have been followed up for nine and eight months respectively. So far, according to Lowsley and Johnson, the results are entirely satisfactory as regards urinary and fæcal control, as well as elimination of the lesion which made urinary diversion necessary. They are of the opinion that the new procedure offers greater hope of longevity, combined with comfort, than any other method now in use.

[1] *Arch. Dermat.*, July, 1955.

[2] *J. Urol.*, January, 1955.

Abstracts from Medical Literature.

BACTERIOLOGY AND IMMUNOLOGY.

Poliomyelitis Infection.

H. K. FABER AND L. DONG (*J. Exper. Med.*, April, 1955) have continued their studies on entry and egress of poliomyelitic infection by observing the relation of viræmia to invasion of the central nervous system. They used cynomolgus monkeys and inoculated groups of four by the intravenous route and into the carotid and the vertebral arteries, and sacrificed them in pairs at intervals after infection with Wistar stock virus in doses of PD_{50} 4·9. Histological examination of levels from the brain and spinal cord were made in all animals. After intravenous inoculation no evidence of invasion of the central nervous system was found. The *area postrema* was normal. After infection into the vertebral artery, severe reactions were observed at varying levels in the spinal cord and brain stem. One of these animals was found dead on the fourth day, and one which was kept developed severe paralysis on the eighth day. After carotid artery infection, two monkeys showed no lesion, and one animal developed bulbar paralysis on the sixth day. The results indicate that in cynomolgus monkeys there is an efficient clearing mechanism for clearing the blood of infective material, and when virus is exposed to passage from the blood to a given region, the blood-neuron barrier does not obstruct passage to collections of susceptible neurons. The invasion of the central nervous system gives a notable difference in the lesion produced by invasion from peripheral nerves in cynomolgus monkeys.

Pathogenesis of Fever.

E. ATKINS AND W. B. WOOD, JUNIOR (*J. Exper. Med.*, May, 1955) began studies on the pathogenesis of fever by making observations on the presence of transferable pyrogen in the blood-stream following injections of typhoid vaccine, since a study of the literature on whether or not there was a relationship between leucocyte changes and fever had failed to produce evidence that this was so. They used rabbits, and had three groups—previously untreated, sensitized (those which had had one or two intravenous injections within five weeks of being used) and "tolerant" (those which had had daily intravenous injections for eight days previously). These donor animals were given their one millilitre of standard typhoid vaccine; then they were bled by cardiac puncture at intervals of five, thirty, sixty or one hundred and twenty minutes after the injection, and serum was obtained. Samples from the groups of animals were pooled and incubated for thirty to forty-five minutes at 37° C. before injection into donor animals in amounts of 10 millilitres given at a rate of one millilitre per second. Then temperatures were recorded every five minutes for the first hour, and at longer intervals up to six hours. Careful precautions were taken to exclude contaminating pyrogens, and normal serum controls were non-pyrogenic. Results showed that normal rabbits responded to serum from unsensitized animals with an immediate rise within five minutes, not reaching normal in two hours; in serum from sensitized animals the rise was less, followed by a steep fall after thirty minutes and a secondary rise in two hours; while the serum from tolerant donor rabbits induced only a small rise with a return to the initial level after two hours. It was evident that each rabbit's previous experience of the antigen determined the rate of removal of the intravenously injected antigen; the normal and the sensitized animals behaved differently, the normal animal showing continuous presence, while the sensitized one never had so much but cleared it completely after thirty minutes. However, a transferable pyrogenic substance was again present, and this may be of endogenous origin and be the factor which affects the thermoregulatory centres in the brain. The serum of tolerant rabbits did not accumulate the secondary substances or show the primary reaction.

Cross Infection with Bacterium Coli.

T. ANDERSON, H. CROCKATT AND C. A. C. ROSS (*J. Path. & Bact.*, July, 1954) have studied cross-infection with type strains of *Bacterium coli* in gastro-enteritis wards. Three wards, all "open" to new admissions, were observed in two different areas. The patients with enteritis came from different social groups. There were also differences in strictness and facilities for nursing techniques. Rectal swabbing material was cultured and examined for *Shigella*, *Salmonella* and *B. coli* types, on the morning after the patient's admission to hospital and at seven-day intervals. MacConkey's medium was used and the growth tested against antisera. Single colonies showing agglutination were tested after subculture on nutrient agar; and if they were still "positive", the O antigen of the organism was tested by tube agglutination. One type of *B. coli* was present in 38·6%, 34% and 23·3% of cases in each of the three hospitals, the commonest type being O.111. Three patients also showed evidence of Sonne dysentery. Of 290 babies who did not harbour one of the three coli types, 14 had non-lactose-fermenting pathogens and were removed to other wards. An analysis of the severity of the enteritis in comparison with the type of organism present showed that there was a tendency for O.111 to be associated with a severe type of illness, and eight of the nine deaths which occurred in the whole series were associated with O.111 cultures. Cross infection (that is, the appearance of a *B. coli* type not found in the primary swab) was found in 34·1%, 23·1% and 24% of babies in each of the three hospitals, and some of the babies who acquired O.111 later died. The duration of stay of the patients in hospital influenced the opportunity for cross infection to occur, although approximately half the number studied did not acquire any *B. coli* type when the stay in hospital was less than three weeks, and those babies "negative" on admission and staying in hospital longest showed a considerable number of cross infections. The authors recommend that every effort should be made to exclude from hospital wards infants suffering from diarrhœa and vomiting.

Maturation of Western Encephalomyelitis Virus.

H. RUBIN, M. BALUDA AND J. E. HOTCHIN (*J. Exper. Med.*, February, 1955) have studied the maturation of western encephalomyelitis virus and its release from chick embryo cells in suspension. They produced monolayers of cells by culturing a tryptic digest of homogenized ten-day chick embryo cells in a Petri dish containing horse serum, chick embryo extract and Earle's saline. After forty-eight hours a continuous layer of cells was formed. Samples of virus were diluted into phosphate buffer saline. The medium was poured off the tissue culture and the diluted virus suspension inoculated and incubated for thirty minutes to allow virus to be adsorbed, and then the surface was covered with agar made up with chick embryo extract. The plates were then incubated for two days in 4% carbon dioxide in air at 37° C. At the end of this time neutral red was added, and living cells were stained, while the plaques due to virus multiplication stood out unstained in contrast. Released virus was assessed by this method, intracellular virus was tested by ultrasonic disintegration of the cells, and in order to determine what proportion of virus had become absorbed to cells, they were assayed immediately after the thirty minutes' adsorption period. No intracellular virus could be detected during the first hour after adsorption in spite of the fact that 10^4 cells proved to be infected. The first finding of virus occurred two to three hours after infection, and it increased exponentially thereafter. The amount in the supernatant exceeded that in the cells by a factor of 20. The results indicated that a virus particle is released from the cell within one minute after it gains the property of infectiousness.

Antibody Formation in Mice.

H. F. HAVAS AND J. ANDRE (*Brit. J. Exper. Path.*, April, 1955) have reported a study of the enhancing effect of adjuvants on antibody formation in mice. They used horse serum albumin, in saline and adsorbed on aluminium hydroxide and other adjuvants, in such dilutions as to give two milligrammes of protein per 0·3 millilitre of fluid. They also added dried heat-killed tubercle bacilli in paraffin in one series. The mice were given either four or eight weekly doses, either by intramuscular or by intraperitoneal route. Half the animals were bled five days and half four days later. Antibody was precipitated from the serum and assayed quantitatively by the micro-Kjeldahl method. The control animals' serum showed no change in the amount stained, while definite increases were obtained; four weeks' immunizing showed the

best result with the tubercle bacillus adjuvant. The eight weeks' results were higher with aluminium hydroxide. There was no difference in response between male and female mice. More mice died after intraperitoneal inoculation than after intramuscular inoculation.

Studies on Immunization Against Plague.

T. H. CHEN AND K. F. MEYER (*J. Infect. Dis.*, March-April, 1955) continued studies on immunization against plague by testing the immunogenicity and toxicity of 11 avirulent variants of virulent strains of *Pasteurella pestis*. They used the method of single colony picking from a series of old strains. They grew them in hormone broth and tested the virulence by intraperitoneal injections into mice. The strains which did not kill the mice were retested before being accepted as avirulent, and the surviving mice were challenged with virulent organisms of the Shasta strain. Ten strains proved to be truly avirulent and were used to immunize guinea-pigs, whose serum was tested after an interval of three weeks by agglutination, complement fixation and protection tests. Two strains gave excellent protection in mice and guinea-pigs; four strains gave weak antibody response, and four were inactive. The authors suggest that the immunogenic strains had fairly wide envelopes and correlate this with antigen content. They state that the immunogenicity was not related to the toxic power of the culture filtrates.

HYGIENE.

Toxicity and Mechanism of Action of "Systox".

W. B. DEICHMANN AND R. RAKOCZY (*Arch. Indust. Health*, April, 1955) have investigated the toxicity, mechanism of action and rate of elimination from green plants of "Systox". This is a new systemic insecticide belonging to the group of organic phosphorus-containing insecticides. It is absorbed by a growing plant through its leaves and roots. The whole plant then becomes "insecticidal" and may continue to contain some fraction of the compound or its products of metabolism for weeks. Commercial "Systox" contains two isomers. The P=O isomer is more toxic than the P=S. The oral LD_{50} for rats is 1·5 milligrammes per kilogram for the first and 7·5 milligrammes per kilogram for the second. The toxic effect is produced by inhibition of cholinesterase. The nicotinic effects are more pronounced and the muscarinic effects are less pronounced than related substances. The "Systox" content of green pasture sprayed with six ounces of "Systox" per acre was estimated two hours, twenty-four hours, two days, twenty-one days and forty-nine days after spraying. The level of "Systox" in milligrammes per kilogram of green material was 10·2, 15·6, 11·1, 1·0 and 0 respectively. Rabbits fed on the green material containing one milligramme per kilogram of "Systox" did not develop signs of intoxication or significant inhibition of plasma cholinesterase activity. Ingestion of greens (two to one hundred and six days) containing a higher concentration of "Systox" was followed, depending on concentration and period of feeding, by immediate or delayed signs of intoxication, by plasma cholinesterase depression and by fatalities.

The Toxicity and Mechanism of Action of "Dipterex".

K. P. DU BOIS AND G. J. COTTER (*Arch. Indust. Health*, January, 1955) have investigated the toxicity and pharmacologic actions of a new organic phosphate, 0,0-dimethyl-1-hydroxy-2,2,2-trichloroethylphosphonate ("Dipterex", L 13/59), demonstrated to be highly effective for the control of houseflies and recommended for use in dairy barns and other areas outside the home. They state that the acute toxicity of "Dipterex" to mammals was relatively low, as evidenced by LD_{50} values of 225, 300 and 500 milligrammes per kilogram for rats, guinea-pigs and mice, respectively, when the compound was administered intraperitoneally. The compound was about one-half as toxic when given orally. The results of these tests indicate that "Dipterex" may be classed among the organic phosphorus-containing insecticides which exhibit relatively low mammalian toxicity. It was observed that the compound was capable of producing subacute poisoning, but daily doses greater than one-fourth of the acute LD_{50} were required to produce mortality during a sixty-day period of treatment. The ability of this insecticide to produce subacute poisoning is therefore much less than in the case of other organic phosphates such as parathion. Acutely toxic doses of "Dipterex" produced symptoms which were typical of cholinergic drugs. It was noted that the duration of action of "Dipterex" was extremely brief, and complete recovery of rats and mice occurred within a few hours after poisoning. Rapid dissociation of the enzyme-inhibitor combination may be one of the factors responsible for the relatively low toxicity of this insecticide. The differential toxicity of the material to mammals and insects may also be explainable on the basis of rapid detoxification in mammalian tissues.

Epidemiology of Infectious Hepatitis.

W. R. STINGER (*Am. J. Pub. Health*, June, 1955) has investigated an outbreak of infectious hepatitis lasting for five months in a community of approximately 30,000 with a public water supply and a municipal sewage disposal system. In all the initial cases the patients attended the same school. The distribution of cases suggested primarily a person-to-person spread, but defects found in the school's plumbing could have accounted for transmission from sewage to the school's water supply. The following epidemiological characteristics were noted. Owing to subclinical infections, non-specific laboratory tests, varying clinical manifestations and poor reporting, the true incidence of infectious hepatitis is difficult to determine. Good personal hygiene and the proper disposal of sewage are of utmost importance in its control. In this outbreak school authorities were advised to initiate a vigorous personal hygiene campaign, stressing handwashing after urination or defæcation and before eating. Children are attacked more frequently than adults, a factor aiding the transmission of this infection. Gamma globulin is an effective prophylactic agent when administered prior to the prodromal stage of the disease. In the reported outbreak 1·5% of contacts who received γ globulin developed infectious hepatitis, whereas 6·2% of those who did not receive γ globulin developed infectious hepatitis.

Diet and Nutritional Status of School Children.

E. S. EPPRIGHT (*Am. J. Pub. Health*, April, 1955) attempted to ascertain the nutrient intake of 1200 school children in Iowa and relate it to their nutritional status. The basic diet constituents were found to be meat, potatoes, sweet desserts, bread and table fat and other cereal foods. The mean daily amount of milk drunk was between two and three cups. The mean daily intake of calcium was therefore low. Many diets were deficient in fruit and vegetables containing vitamin *C* and carotene. Nutritional status was based on height and weight measurements, hæmoglobin determination and serum concentrations of alkaline phosphatase, ascorbic acid and carotenoids. Dental and medical examinations were also included. A fundamental relationship was revealed between diet, nutrient consumption and nutritional status on a group basis. In a group of over-size teenage girls with poor diets, food intake and physical development were unrelated. More than half of the teenage group of girls had inadequate diets. The survey indicated that weight control and dental caries were the two principal health problems associated with nutrition.

Disinfection of Air in Schools and School Buses.

F. W. GILCREAS AND H. R. READ (*Am. J. Pub. Health*, June, 1955) have investigated the effect of disinfection of school-room air by triethylene glycol vapour and by irradiation with ultraviolet light. Disinfection of the air in school buses by triethylene glycol vapour was also investigated. In the irradiated rooms tested over a nine-year period, a reduction of 37% was found in the total bacteria per cubic foot, of 39% in bacteria settling per square foot per minute, and of 44% in streptococci. When the results from the school which was completely treated with glycol were compared with those of the control school, a reduction of 60% was found in the total bacteria per cubic foot, of 55% in the bacteria settling per square foot per minute, and only of 11% in streptococci. The epidemiological investigation carried out concurrently with the laboratory phase placed its major emphasis on the effect of protective agents on the incidence of measles, mumps and chickenpox. No significant reduction was found in any. A study of the percentage of person-days absence owing to respiratory illness in the same schools showed no reduction either in the irradiated or in the glycol-treated school.

British Medical Association News.

MEETING OF THE FEDERAL COUNCIL.

A MEETING of the Federal Council of the British Medical Association in Australia was held at the William H. Crago Council Chamber, British Medical Association House, 135 Macquarie Street, Sydney, on August 18, 19 and 24, 1955, DR. H. C. COLVILLE, the Vice-President, in the chair.

DEATH OF THE PRESIDENT, SIR ARCHIBALD COLLINS.

The Vice-President, Dr. H. C. Colville, said that members of the Council had gathered together under the shadow of a great loss occasioned by the recent death of Sir Archibald Collins. The last time when Dr. Colville had spoken of the late President was at the previous meeting of the Federal Council, when, on behalf of the members, he had congratulated him on the honour recently conferred on him by Her Majesty the Queen. On the present occasion they were filled with sadness, and his remarks were very different. Dr. Colville went on to remark that he did not intend to make any attempt at a recital of all that the late President had done for the Council and for the Association. He formally moved a motion which was carried by the members standing in silence. The motion was as follows:

> The Federal Council of the British Medical Association in Australia records with deep regret the death of Archibald John Collins, Kt., D.S.O., M.C., M.B., Ch.M., F.R.A.C.P., President of the Council from 1951 until the time of his death. During this period he not only displayed the qualities of inspired leadership, but in addition he earned the personal respect and affection of every member of the Council who served under him. His passing will be an irreparable loss to his country and to his colleagues. The Federal Council extends its sympathy to Lady Collins and his family.

MINUTES.

The minutes of the Federal Council meeting of February 14, 15 and 16, 1955, which had been circulated amongst members, were taken as read and signed as correct.

REPRESENTATIVES.

The following representatives of the Branches were present:

New South Wales: Dr. W. F. Simmons, Dr. A. J. Murray, O.B.E., Dr. T. Y. Nelson (as substitute for Dr. E. F. Thomson).

Queensland: Dr. A. E. Lee, Dr. H. W. Horn.

South Australia: Dr. L. R. Mallen, Dr. C. O. F. Rieger.

Tasmania: Dr. J. B. G. Muir, Dr. L. N. Gollan.

Victoria: Dr. H. C. Colville, Dr. Charles Byrne, Dr. Robert Southby.

Western Australia: Dr. D. E. Copping, Dr. C. W. Anderson.

The Vice-President explained that Dr. T. Y. Nelson was acting as subsitute for Dr. E. F. Thomson, who had been appointed as New South Wales representative in place of the late Sir Archibald Collins; unfortunately Dr. Thomson was unable to attend on account of illness. Dr. Colville welcomed Dr. Nelson to the meeting. Dr. H. R. R. Grieve, as representing New South Wales, was not present and sent a proxy in favour of Dr. W. F. Simmons.

The Federal Council received an apology from Dr. E. F. Thomson for his non-attendance at the meeting, owing to illness. It resolved that a letter should be sent to Dr. Thomson, expressing sympathy with him in his illness and wishing a speedy recovery.

APPOINTMENT OF OFFICE-BEARERS.

The General Secretary reported that only one nomination had been received for the position of President, that of Dr. H. C. Colville. Dr. Colville thanked the members for his election. He said that he would find it difficult to follow such outstanding members of the Association as Sir Henry Newland, Sir Victor Hurley and Sir Archibald Collins. He would endeavour to justify the confidence which the members had placed in him.

Only one nomination was received for the position of Vice-President, that of Dr. Angus Murray. The President declared Dr. Murray elected.

HONOURS.

The General Secretary referred to honours which had recently been conferred by Her Majesty the Queen on members of the medical profession in Australia. The honour of knighthood had been conferred on Dr. Albert E. Coates, Professor Harold R. Dew and Dr. Darcy R. W. Cowan. Dr. B. K. Rank and Dr. A. R. F. Vicars had been appointed Companions of the Most Distinguished Order of Saint Michael and Saint George. Dr. W. C. McClelland, Dr. F. G. Morgan and Dr. J. L. Grove had been appointed Commanders of the Most Excellent Order of the British Empire. Letters of congratulation had been sent to Sir Albert Coates, Sir Harold Dew, Sir Darcy Cowan, Dr. E K. Rank, Dr. A. R. F. Vicars, Dr. W. C. McCelland, Dr. F. G. Morgan and Dr. J. L. Grove.

FINANCE.

The financial statement of the Federal Council as at August 16, 1955, was presented by Dr. W. F. Simmons, the Honorary Treasurer, and adopted. Dr. Simmons said that the finances of the Federal Council were in a healthy state. Of the capitation fees from the Branches due for 1955, amounting to £9389 2s., the sum of £7806 had been paid. This meant that something like £1582 was still owing. With the sum standing to the credit of the Federal Council, the available funds amounted to a little more than £8064. Dr. Simmons estimated the expenses of the Federal Council to the end of 1955. He thought that two further meetings of the Federal Council might be required before the end of the year, and the other expenses, exclusive of anything that might be spent in the payment of an assistant secretary, would bring the sum to be expended to £3875. That meant that the estimated credit balance at the end of the year was £4189. Dr. Simmons explained that an amount of that size should always be available for use by the Federal Council in case unexpected expenditure had to be met. The financial statement was adopted.

At the previous meeting of the Federal Council Dr. L. R. Mallen had given notice of motion that the by-law dealing with the *per capita* payment of the Branches should be altered so that the Council would be in a position to deal adequately with its increasing activities. He therefore moved:

> That by-law 15 (iii) be amended by the deletion of the words "twenty-one" and the substitution in lieu thereof of the word "thirty", so that the by-law will read: "To meet the general and other expenses of the Federal Council the Treasurer of each Branch shall pay to the Federal Council such sum or sums as the Federal Council may require, provided that the total so payable in any year shall not exceed a sum equal to thirty shillings per member of the Branch."

The motion was carried.

Dr. Simmons discussed the capitation rate for 1956. The Federal Council resolved that the contribution of the Branches to the expenses of the Federal Council for the year 1956 should be at the rate of 25s. for each member on the membership list at January 1, 1956.

Dr. Simmons also made a statement on the organization fund of the Federal Council. The statement covered the period ended August 15, 1955. During the twelve months the sum of £500 had been made available to the Repatriation Department Medical Officers' Association in connexion with their application for increased salaries. The amount standing to the credit of the fund at the time of the meeting was £1469.

Dr. Simmons made a statement on the state of the Federal Independence Fund of the Federal Council as at August 15, 1955. The amount standing to the credit of the fund was £21,236. During the period of six months the sum of £466 had been earned as Commonwealth Treasury interest. The sum of £20,500 had been invested in Commonwealth Treasury bonds.

Dr. Simmons pointed out that the Federal Council entertainment fund had a credit balance of £257 3s. 11d.

SECRETARIAT.

At its meeting in February, 1951, the Federal Council resolved that the President, Dr. A. J. Collins, the Vice-President, Dr. H. C. Colville, and the Honorary Treasurer, Dr. W. F. Simmons, in consultation with the General Secretary should be empowered to appoint an assistant general secretary of the Federal Council at a suitable salary. The General Secretary reported that the subcommittee thought that an appointment should be made, but a communication had been received from the New South Wales Branch,

requesting that the position should be advertised in THE MEDICAL JOURNAL OF AUSTRALIA. Dr. A. J. Murray moved in terms of the New South Wales Branch's letter, and the motion was seconded by Dr. Robert Southby. It was put to the meeting and carried. The New South Wales Branch in its letter had suggested that if the Federal Council was willing, the branch was prepared to subscribe £750 *per annum* towards the salary of the assistant general secretary for assistance in the work of the New South Wales Branch. The General Secretary pointed out that it would be very valuable for a newly appointed assistant to have actual experience of Branch Council work. The Federal Council resolved to accept the offer of the New South Wales Branch. It was resolved that the salary offered for the position should be £2250 *per annum*, and that in addition superannuation should be on the basis of 10% of the salary paid annually by the Federal Council and 5% contributed by the appointee. It was also decided that the executive officers of the Federal Council should be empowered to make the appointment after the advertisement had appeared. Finally it was resolved that the appointment should be subject to three months' notice of termination by either party.

HENRY SIMPSON NEWLAND PRIZE FUND IN SURGERY.

Dr. W. F. Simmons, the Honorary Treasurer, presented a statement of the present position of the Henry Simpson Newland Prize Fund in Surgery. The amount standing to the credit of the fund was £1135.

It was noted that the committee had awarded the first prize to two joint authors, Frank Mitchell Ramsay, of the Cancer Institute Board, Melbourne, and William Winslow Woodward, surgeon, of the Launceston Hospital. The prize would be presented at the University of Sydney on the occasion of the delivery of the Henry Simpson Newland Oration during the forthcoming Congress. Dr. Ramsay would not be able to be present, but Dr. Woodward would attend. The title of the prize essay was: "The Influence upon Surgical Practice of Irradiation and Endocrine Therapy."

MEDICAL OFFICERS' RELIEF FUND (FEDERAL).

On behalf of the trustees of the Medical Officers' Relief Fund (Federal), Dr. W. F. Simmons presented a report for the six months ended June 30, 1955. He said that there was practically no change in the fund. Some increased allowances had been made to two beneficiaries. The amount standing to the credit of the fund was £7533. The General Secretary said that Dr. R. H. Macdonald had been appointed as trustee for New South Wales in the place of the late Sir Archibald Collins. The report was adopted.

FEDERAL MEDICAL WAR RELIEF FUND.

On behalf of the trustees of the Federal Medical War Relief Fund, Dr. W. F. Simmons presented a report for the six months ended June 30, 1955. He said that the fund was active and that the payments that were being made were greater than the amount of income that was being received. The assets of the fund had decreased by the sum of £321. Eleven benefactions had been paid during the half-year. The report was adopted.

INQUIRIES FROM OVERSEAS ABOUT MEDICAL PRACTICE IN AUSTRALIA.

The General Secretary reported that he had, as usual, received several inquiries from medical practitioners overseas in regard to conditions of practice in Australia. He had sent a suitable reply in each instance.

A REQUEST FROM THE SWEDISH MEDICAL ASSOCIATION.

The General Secretary reported that he had received a letter from the Swedish Medical Association, stating that Dr. Axel Odelburg would be visiting Sydney shortly for a period of ten days, and asking whether a programme could be arranged for his studies. He would be going on to visit New Zealand. It was noted that Dr. Odelburg wished to study the national health services, to see something of the type of surgery that was being carried out in Australia, and also to study the flora and fauna. The General Secretary said that Sir Herbert Schlink, with whom he had discussed the matter, had kindly offered to arrange for Dr. Odelburg to stay at the Royal Prince Alfred Hospital. He had advised Dr. Odelburg of this offer and suggested that he should communicate with Sir Herbert Schlink.

INQUIRY FROM AMERICA ABOUT POST-GRADUATE MEDICAL EDUCATION IN AUSTRALIA.

The General Secretary reported that he had received a letter from the American Medical Association, making inquiries about post-graduate medical education in Australia. He said that the letter had been referred to Dr. W. W. S. Johnston, of the Australian Post-Graduate Federation in Medicine, and that he had sent some information which had been published in THE MEDICAL JOURNAL OF AUSTRALIA in 1952. The matter was further discussed, and it was resolved that the attention of the Australian Post-Graduate Federation in Medicine should be directed to the letter of Dr. Edward L. Turner, Secretary of the Council on Medical Education and Hospitals of the American Medical Association, and of Dr. Austin Smith, Editor of *The Journal of the American Medical Association*, in regard to the recognition of foreign medical schools. It was also resolved that a suggestion should be made to the Australian Post-Graduate Federation in Medicine that it should approach the Faculty of Medicine in the Universities of Melbourne, Sydney, Adelaide and Queensland, with a view to securing recognition of Australian schools of medicine by the Council on Medical Education and Hospitals of the American Medical Association and the Association of American Medical Colleges. It was pointed out that if this was done it would be of considerable advantage to Australian post-graduate students studying in America.

Dr. A. E. Lee pointed out that Dr. Malcolm McEachern had recently been in Australia making inquiries about hospitals and post-graduate education, and the Federal Council accepted his suggestion that Dr. McEachern should be asked to represent to the Council on Medical Education and Hospitals of the American Medical Association and to the Association of American Medical Colleges, the standards of medical education in the Australian universities, with a view to their recognition in America as approved medical schools.

AN INQUIRY FROM THE UNITED STATES OF AMERICA ABOUT BREAST-FEEDING IN AUSTRALIA.

The General Secretary said that he had received from the Evanston Hospital Association in Illinois, United States of America, a letter inquiring into the position of breast-feeding in Australia, and submitting a *questionnaire* for completion. The General Secretary said that he had replied to the *questionnaire* after communicating with the Branches. He had stated that for premature babies breast milk was regarded as the most suitable food, and that this was also true of full-term infants. In regard to inquiries about breast milk banks, he had stated that there was such an organization in New South Wales and in South Australia, but not in the other States.

THE ASIAN CONFEDERATION OF MEDICAL ASSOCIATIONS.

The General Secretary reported that he had received from Dr. R. Gonzalex, the President of the Asian Confederation of Medical Associations, a copy of the minutes of a meeting of the Association held on April 29, 1954, together with a copy of the constitution and by-laws. Dr. Gonzalex expressed the hope that the British Medical Association in Australia would find it an advantage to become a member of the Confederation. Members of the Federal Council agreed that it was highly desirable that the medical associations of Asian countries should meet for purposes of mutual discussion; but it was thought that the World Medical Association would provide what was necessary. The expense associated with the World Medical Association was considerable, and it was not easy to find suitable representatives to attend all its assemblies. It did not seem right to add to the difficulties or to the expense by joining another confederation of associations. For this reason the Federal Council resolved not to accept the invitation of Dr. Gonzalex.

THE MEDICAL ASSOCIATION OF ISRAEL.

The General Secretary reported that he had received an invitation for the British Medical Association in Australia to be represented at the Third World Congress to be held at Tel Aviv from August 10 to 17, 1955. He said that the correspondence had been sent to the Branches, and that the Medical Association of Israel had been informed that if any members of the British Medical Association in Australia were travelling abroad and could attend the conference, the invitation would be accepted. The Medical Association of Israel also asked whether there was any obligation on young medical practitioners in Australia to serve in rural districts. The General Secretary had replied that there was no law to that effect. The General Secretary's action was approved.

AN INQUIRY ABOUT FEES FROM SOUTH AFRICA.

The General Secretary reported that he had received a letter from the Medical Association of South Africa inquiring about the control of fees charged by medical practitioners in Australia. A reply had been sent, to the effect that the

Branches of the Association exercised no control over their members in the matter of fees. On occasion when disputes arose between patients and doctors as to fees, these were often settled by arbitration by committees of Branch Councils.

THE MEDICAL PERSONNEL NEEDS OF THE COMMUNITY.

A communication was received from the Victorian Branch, together with a document drawn up by a special committee of the Branch entitled "The Medical Personnel Units of the Community". The opinion was expressed that the document was of considerable value and interest, and it was resolved that the Victorian Branch should be thanked and that the document should be received.

A MEDICAL SCHOOL FOR WESTERN AUSTRALIA.

A report was received from the Western Australian Branch on the proposed medical school for Western Australia. Dr. D. E. Copping gave some details of the stage to which arrangements had been made, and he pointed out that the contribution of the medical profession in Western Australia to the medical school would probably be in the vicinity of £40,000.

ADVANCE OF EDUCATION COUNCIL.

The General Secretary reported that he had received from the Advance of Education Council a request that the Federal Council should appoint a representative to a deputation which was to wait on the Commonwealth Treasurer for the purpose of securing an increased Commonwealth grant for education. He had replied that the Federal Council was concerned with medical education only. The Secretary's action was approved.

COUNCIL FOR ABORIGINAL RIGHTS.

The General Secretary said that he had received a letter from the Council for Aboriginal Rights, asking that it should be advised of the policy of the Federal Council in regard to the medical treatment of Australian aborigines. He had replied that medicine knew no race or creed or colour.

AUSTRALASIAN MEDICAL CONGRESS (BRITISH MEDICAL ASSOCIATION).

Ninth Session.

The General Secretary reported that Major-General W. D. Refshauge had accepted an invitation to be a Vice-President of the Ninth Session of Congress.

A letter had been received from the Parent Body stating that Dr. Talbot Rogers, member of the Central Council and Chairman of the General Medical Services Committee, had been appointed to act as representative of the Parent Body at the Ninth Session of Congress.

Dr. G. A. Dunlop, of Port Elizabeth, South Africa, had been appointed as representative of the Medical Association of South Africa to the Ninth Session.

It was noted that the University of Sydney had decided to confer the honorary degree of Doctor of Science on Dr. Louis H. Bauer, who was to deliver the Henry Simpson Newland Oration at the meeting of Congress. The title of Dr. Bauer's oration would be: "World Problems in Medicine."

The General Secretary reported that the following persons had been elected honorary members of Congress: Dr. H. P. F. Assheton-Chin, Dr. Louis H. Bauer, Mr. K. H. Clarke, Mrs. D. Margaret Spencer, Lady Collins, Professor Sir Harold Dew, Dr. G. A. Dunlop, Professor C. G. Lambie, Professor E. Ford, Professor A. J. Arnott, Professor R. I. Harris, Professor R. M. C. Gunn, Miss M. Ievers, Professor T. G. Room, Professor T. N. A. Jeffcoate, Mr. Edgar Rouse, Sir Charles Lloyd Jones, Lady Lloyd Jones, Dr. Andrew Morland, Dr. John Morton, Professor D. R. MacCalman, Miss Margaret Telfer, Miss K. Ogilvie, Dr. Phyllis M. Rountree, Dr. A. Talbot Rogers, Professor Emery Rovenstine, Dr. N. F. Stanley, Professor B. W. Windeyer, Dr. Shubbar-Hassan, Dr. U-Phang-Aung, Dr. U-Tin-Kyee, Dr. Fidel R. Nepomuceno, Dr. Ignacio B. Nebrida, Dr. Antonio Singson, Dr. L. G. J. Samallo, Dr. Nio Kok Hien, Dr. Soeroso, Dr. Sombun Phong Aksara, Dr. (Mrs.) Sripraphai Phong Aksara, Dr. Prakorb Visalvethaya, Dr. Smarn Muntarbhorn, Dr. Ngo-Quang-Ly, Dr. Pham-Ba-Vien, Dr. Truong Dinh-Vy, Dr. U. Chhin, Mr. Ber Ken Hean, Dr. J. R. Wilson, Dr. H. J. F. Jayasuriya, Dr. R. E. Anderson, Dr. C. E. Smith, Dr. Sen Gupta, Dr. E. C. Vardy, Dr. W. Glyn Evans, Dr. J. Holm, Dr. De Marchi, Dr. E. Massal, Dr. T. J. Joseph, Dr. S. N. Majundar, Dr. H. E. MacDonald, Dr. G. E. Godber, Dr. Lawrence O. Roberts, Dr. H. M. Vanderwall, Dr. Jae. S. De Vries, Dr. Madhusudan Tal Mastey, Dr. Yagya Raj Joshi, Dr. M. Salato, the Reverend Clarence Nathanielsz, Dr. Same Pring Puangkeo, Dr. M. Fatina, Dr. G. Keys-Smith, Dr. A. Rytel.

Tenth Session.

Preliminary discussion was held on the holding of the Tenth Session of Congress in 1958. It was pointed out that invitations from Branch Councils for the holding of the Congress would be considered at the next meeting of the Federal Council.

AUSTRALASIAN MEDICAL PUBLISHING COMPANY, LIMITED.

The General Secretary reported that he had received notice of the meeting of directors of the Australasian Medical Publishing Company, Limited, to be held on Saturday, August 20, 1955, and also a notice of the 42nd Ordinary General Meeting to be held on the same day at The Printing House, Seamer Street, Glebe.

MEDICAL PLANNING.

National Health Service.

Pensioner Medical Service.

The Federal Council had before it a memorandum drawn up by Dr. H. C. Colville and forwarded by the Victorian Branch. The memorandum was a suggestion for the amendment of the Pensioner Medical Service with the object of minimizing abuse. The basic principle of the memorandum was that a limited number of vouchers should be issued to pensioners instead of an unlimited number of vouchers to doctors. The details of the scheme were as follows: (i) On the last pension pay day in December, every pensioner was to be issued with a book of possibly twenty vouchers, clearly stamped with the date of the ensuing year, and valid for that year only. (ii) If, during the year, the pensioner required medical services in excess of twenty, he might obtain a further issue of twenty vouchers from any post office, by filling in an appropriate form, and also tendering a medical certificate stating why further vouchers were necessary. (iii) Payment to medical practitioners for vouchers of any given year was not to be made if the vouchers were submitted later than February 1 of the ensuing year. The advantages claimed for this procedure was, first of all, that the pensioner would immediately be charged with a responsibility in the abuse of vouchers, where at present he had none. In the second place, the pensioner would value the vouchers and be unwilling to part with them for two reasons: first because they would represent an insurance against future sickness, and secondly because he would realize that he would have to go to some trouble to obtain further supplies. The memorandum went on to state in comment that the only drawback that could be envisaged in the scheme would be that at the end of each year large numbers of unused vouchers would be in the possession of large numbers of pensioners. However, any attempt to use such vouchers for purposes of fraud could be initiated only if a doctor made a definite approach to a pensioner to commit a fraudulent act; for this to be successful the pensioner would have to agree to be a party to an act which he would know to be fraudulent. Such a conspiracy would surely be most infrequent, and if a penalty of a fine of, say, £50 or three months' gaol for both parties to the conspiracy was laid down, the practice would be almost non-existent. Moreover, the present Expert Committees of Inquiry would no longer be required, as over-attendence by doctors would practically cease, for the reasons mentioned, and the only abuse of the system of which a doctor would be capable would be in the nature of a civil offence. After a discussion in which Dr. L. R. Mallen said that he did not think such a procedure would stop abuses, the Federal Council resolved that the memorandum should be adopted and regarded as the official policy of the Federal Council. It would be placed before the Minister for Health.

The Federal Council considered its resolution of October 28, 1954, in which it stated its intention to reopen the discussion on proposals made by the Prime Minister and on the whole future of the Pensioner Medical Service, if an agreement between the Commonwealth Government and the medical benefits organizations acceptable to the medical profession was not completed in time for implementation in or before the next Budget. Reference was also made to another resolution adopted in October, 1954, to the effect that the latest date compatible with the resolution already referred to was March 31, 1955.

The President explained that the committee appointed to examine and report on the Pensioner Medical Service had failed to reach an agreement on the proposal to provide

medical services to pensioners through medical benefits organizations. The committee had accordingly decided to recommend to the Minister for Health that the present Pensioner Medical Service should be preserved, and that in addition there should be developed a supplementary scheme of providing medical benefits for pensioners enrolled in the Pensioner Medical Service and their dependants through registered organizations under special tables, at reduced rates of contributions payable by the pensioner. It seemed that the Pensioner Medical Service would continue in its present form and that voluntary insurance in respect of items in Schedule I other than those included in the Pensioner Medical Service would be proposed. It was for the Federal Council to determine the conditions under which the free Pensioner Medical Service would continue. This should be determined before October 31, 1955.

The General Secretary read a letter addressed to the late Sir Archibald Collins by the Minister for Health. In this letter the Minister referred to the report of the committee appointed to examine the Pensioner Medical Service. The committe had drawn attention to two aspects of the proposed plan that would necessitate amendment of the agreement between the Commonwealth and the Federal Council, under which the Pensioner Medical Service was operating. In the first place, it would be necessary to substitute for the present broader definition of the scope of the medical services, covered by the agreement, a precise definition that would enable a clear line of demarkation to be drawn between those services and the services for which benefits would be provided by registered organizations under the special pensioner table. The committee had suggested that the amended definition should as clearly as practicable include in addition to Item 1 (1) of the First Schedule, all the services which at present were accepted generally as being within the scope of the Pensioner Medical Service. Unless this was done, the committee thought that the pensioner's contribution to the proposed special pensioner insurance table would have to bear part of the doctor's fees for some services that were now obtained free of charge under the Pensioner Medical Service. Pensioners who did not join organizations would have to pay the whole of the fee for some services that they were now receiving without charge. The Minister was entirely in agreement with the views expressed by the committee. The other matter affecting the agreement was the need for an effective deterrent against abuse in the Pensioner Medical Service. The State Committees of Inquiry had done valuable work, but could ordinarily deal only with particular cases of abuse after it had taken place. What was needed was some effective method of preventing the abuse from occurring in the first instance. This problem had been considered recently by the Medical Services Federal Committee of Inquiry, and this committee had made certain recommendations to the Minister. These recommendations were four in number. They were considered in detail by the Federal Council.

The first recommendation stated that where attendance on a pensioner for the one illness continued beyond a certain period, payment to the doctor for attendance after that period would be made at a weekly rate. The Federal Council did not approve of this proposal.

The second recommendation stated that where a doctor attended a number of patients at the same place during the same visit, payment for the attendance in excess of one would be at the rate applicable to surgery consultations under the agreement. The Federal Council approved of this proposal.

The third recommendation stated that payment would not be made for vouchers received by the Department of Health more than three months after the date on which the relevant service was rendered. At the same time it was said that if a doctor could advance valid reasons for his failure to submit vouchers for payment within the time specified, his claim would be met. The Federal Council approved of this proposal.

The fourth proposal was that sessional fees would be payable for attendances in excess of six on pensioners at hospitals and institutions at the one visit as previously suggested by the Federal Council. The Federal Council approved of this recommendation, with the proviso that a satisfactory sessional fee should be agreed upon. The Federal Council discussed the sessional fee for such attendances, and decided that it should be three guineas for the first hour and one guinea for each subsequent half-hour or part thereof.

Abuses.—The Federal Council discussed the question of abuse of the Pensioner Medical Service. The Queensland representatives put the view of the Queensland Branch that more publicity should be given to cases in which abuse had been proved, and that the names of practitioners concerned should be published. After discussion the Federal Council resolved to recommend to the Government that more publicity than at present be given to offences committed by medical practitioners under the *National Health Act*, and that the names of those found guilty of such offence and the nature of the offences should be published. It also decided to recommend to the Government that it should be clearly indicated on the pensioner's entitlement card that a medical practitioner was entitled to only one voucher for each attendance.

The Scope of the Service.—The Federal Council discussed the scope of the service and decided that it should be as formally defined in the regulations under the *National Health Act*, with certain specific exclusions. The first exclusion, in its opinion, should be the after-treatment for an operation requiring a local or general anæsthetic when the doctor making a claim or a partner had performed the operation. The second exclusion decided upon was the treatment of all fractures except those of toes, fingers, ribs and the Colles's fracture. After discussion, the Federal Council resolved that the rates for attendance by medical practitioners under the Pensioner Medical Service should be twelve shillings and sixpence for a surgery consultation and fifteen shillings for a visit. They decided that these fees would be acceptable for a period of two years as from November 1, 1955, and that the fees would then be subject to automatic review. The decisions named were to be contingent on the acceptance of no new categories of pensioners into the Pensioner Medical Service.

Mileage.—The Federal Council discussed the subject of mileage at the instance of the Tasmanian Branch, which had requested that consideration should be given to amending the payment for mileage as follows: (*a*) the minimum mileage to be reduced from three to two miles; (*b*) the maximum limit of ten shillings payable by the patient to be abolished; (*c*) extra payment for night mileage to be made available. The General Secretary said that he had submitted the Tasmanian letter to the Branches and had received replies. The Queensland Branch did not support the general principle of increased mileage, but suggested that if special difficulties existed in Tasmania, they should be given individual consideration by the Commonwealth Government. The New South Wales Branch supported the reduction of mileage from three miles to two, but did not support the abolition of the maximum limit of ten shillings payable by the patient. It supported the extra payment for night mileage. The Victorian Branch decided to leave the matter in the hands of its delegates. The South Australian Branch supported the views of the Tasmanian Branch. The Western Australian Branch supported the suggestion that the minimum should be reduced from three to two miles, but did not agree that the maximum limit of ten shillings payable by the patient should be abolished. In regard to extra payment for night mileage, it supported the Tasmanian suggestion, provided the extra payment was to be made entirely by the Commonwealth Government and not by the pensioner. The Federal Council resolved that the minimum mileage should be reduced from three miles to two, and that extra payment for night mileage should be made available. It was of the opinion that the extra payment for night mileage should be paid by the Commonwealth Government and that it should be made at the rate of two shillings extra per mile. Reference was also made to two previous decisions of the Federal Council. The first was that in the more sparsely populated areas where a practitioner might be sick or absent, the nearest practitioner treating a patient should be paid mileage. The second was that the Government should be asked to give consideration to the payment of a special fee when a medical practitioner found it necessary for him to cross a river by ferry for the purpose of attending a pensioner.

Pharmaceutical Benefits.—In the mattter of pharmaceutical benefits, the New South Wales Branch had requested that the Commonwealth Government should be asked to increase the amounts allowed at present for eye drops. The General Secretary said that this had been done.

General Pharmaceutical Benefits.

Pharmaceutical Benefits Advisory Committee.—The General Secretary said that in connexion with the Pharmaceutical Benefits Advisory Committee, acting under the provisions of the *National Health Act*, the Director-General of Health had requested that a panel of two names should be submitted to the Minister for Health in order that he might choose a member of the Association to replace the late Sir Archibald Collins. The executive officers had submitted a panel of two names—Dr. A. W. Morrow and Dr.

K. S. Harrison. The action of the Executive Committee was approved.

Additional Benefits.—The General Secretary said that requests had been received from several sources asking for the inclusion of additional benefits; these requests had all been sent on to the Pharmaceutical Benefits Advisory Committee.

Payment for Supply of Medical Benefits.—At a previous meeting of the Federal Council a request was made to the Minister for Health that medical practitioners doing their own dispensing should be allowed the dispensing fee payable in connexion with the supply of general pharmaceutical benefits. A reply had been received from the Minister that the request could not be granted. At the meeting of the Council in February, 1955, a further request was made to the Minister that the fee should be allowed. No reply had been received. The General Secretary said that the matter was still under consideration.

The Lessening of Clerical Work.—The General Secretary stated that, acting on a decision of a previous meeting of the Federal Council, he had written to the Director-General of Health at Canberra, asking that with a view to lessening the amount of clerical work required of medical practitioners, the Council offered the following suggestions: (i) that the doctor's signature on the back of a prescription should be sufficient endorsement to signify that he had taken delivery of the benefits on behalf of the patient for whom the prescription was written, provided the doctor's address was shown on the prescription form; (ii) that the signature and address of the patient's agent should be sufficient endorsement on the back of a prescription for pharmaceutical benefits; (iii) that where the duplicate of a prescription was not a carbon copy, the word "duplicate" be inserted. It was considered that it was not necessary to insert the word "duplicate" in a carbon copy. The General Secretary said that the Director-General had replied to these three points as follows: (i) There were now provisions for a doctor's bag. Therefore, there was not a great necessity for the doctor to collect pharmaceutical benefits, acting on behalf of a patient. Consequently, where a doctor acted as the patient's agent, he should, like any other agent, indicate on the prescription that he had received a benefit for and on behalf of a patient, giving his signature and address. In many cases the pharmacist had a stamp for the prescription, the only additional writing necessary being the signature and address of the agent. (ii) Again, legally a receipt was necessary for a pharmaceutical benefit. When a chemist used a stamp the signature and address of the agent were all that was necessary. When, however, a stamp was not available, the agent had to indicate that he had received the benefit for and on behalf of the patient. (iii) It was sufficient for the word "duplicate" to be placed upon a prescription for acceptance, even if it was not a carbon copy. The General Secretary said that the Queensland Branch had written expressing dissatisfaction with the reply of the Director-General of Health. The Federal Council resolved that a further approach be made to the Director-General.

Supply to Injured Workers.—A letter was received from the Western Australian Branch, inquiring in regard to the legality of the supply of general pharmaceutical benefits to injured workers. The Branch wished to know what was done in other States. It was pointed out that in States other than Western Australia general pharmaceutical benefits were always supplied to injured workers.

Medical Benefits.

The General Secretary read a letter dated June 20, 1955, which he had received from The Royal Australasian College of Physicians. In this letter the College referred to an approach made directly to the Minister for Health some time previously, in regard to certain aspects of the medical benefits scheme. The matter had been raised again at the request of one of the members of the College at a recent meeting of the Executive Committee, and it had been decided to make a further approach to the Minister on the lines of the previous communication. The Executive Committee had thought it desirable that the College should follow this matter up on its own initiative, but as the Council of the College was anxious to keep the Federal Council fully informed, a copy of the letter of the College to the Minister was enclosed. The letter of the College to the Minister dealt with the obtaining of a larger rebate under the medical benefits scheme for patients referred to a specialist physician by another practitioner for a clinical medical opinion, and a larger rebate for a specialist physician when called by another practitioner to visit in consultation. It was pointed out in discussion that although the College had, in general, agreed that the Federal Council was the body which should make approach to governments, the College still reserved the right to make an approach when it thought necessary.

Definition of Professional Attendance.—At the previous meeting of the Federal Council, a communication had been received from the Ophthalmological Society of Australia (British Medical Association) dealing with the fact that the medical benefit did not include an attendance on an ophthalmic surgeon, at which was made an examination of a patient's sight for the purpose of correcting errors of refraction by the prescription of spectacle lenses. The General Secretary reminded the Federal Council that, according to Item 1 (1) of the Schedule, professional attendance was referred to as "attendance, including attendance at rooms, surgery, home or hospital, but not including an attendance at which there was made an examination of a patient's sight for the purpose of correcting errors of refraction by the prescription of spectacle lenses". The Ophthalmological Society of Australia took exception to the position which had been created. It meant that many patients who consulted ophthalmologists received no medical benefit under the scheme for the provision of benefits. At the previous meeting, the General Secretary pointed out that the anomaly would be rectified if the addition of the word "solely" was made, in other words, that an attendance would be excluded at which an examination of a patient's sight was made solely for the purpose of correcting errors of refraction. The Ophthalmological Society of Australia wished to know now whether the Federal Council had made any progress in trying to secure the rectification of the anomaly. It was clear that no alteration such as had been asked for by the Ophthalmological Society could be made without an alteration of the Act, and up to the present no amendments had been made to it.

Dual Membership.—The General Secretary stated that a communication had been received from the New South Wales Branch asking that the Federal Council should make representations to the Federal Government to prevent the dual membership of medical benefits organizations. It pointed out that at the present time the Government insisted that all medical benefits organizations should have a rule whereby the combined benefit paid should not exceed 90% of the doctor's account. Whilst the payment from an individual organization might not exceed the 90%, the additional amount of the second "fund" benefit might be instrumental in causing the 90% to be exceeded. The matter had been referred to the Branches, and replies had been received. The Queensland Branch supported the view of the New South Wales Branch. The Victorian Branch expressed the opinion that the problem of dual membership was not the concern of the Association. The South Australian Branch supported the view of the New South Wales Branch. The Western Australian Branch thought that the matter was one for the management of benefits societies and not a matter which directly concerned the British Medical Association. The Tasmanian Branch thought that dual membership should not be possible. After discussion, the Federal Council resolved that representation should be made to the Federal Government that steps should be taken to prevent the dual membership of medical benefits organizations.

Definition of a Specialist.—Further reference was made to the definition of a specialist, which had been asked for by the Minister for Health in order that the payment of medical benefits under the Act might be facilitated. The matter was discussed at the meeting of the Federal Council held in September, 1954. A discussion on this subject at the last meeting of the Federal Council will be found in this journal in the issue of March 26, 1955, at page 477. At that meeting it was pointed out that a resolution dealing with the matter had been submitted to the Minister, and that it had not yet been approved. It was then resolved that the subject be further discussed with the Minister. The General Secretary said that he had received a letter from the Minister, bearing the date February 23, 1955. This letter had been sent on to the Branches. In this letter two matters were raised with the Minister. The first was the inclusion of a clause in the proposed definition, to the effect that a medical practitioner who was registered as a specialist under the law of a State could also be registered as a specialist by the Board of Reference. The second was a proposal that the Association should be responsible for the establishment of Boards of Reference, and would compile and maintain the register of specialists. The Minister, in his letter, asked the Federal Council to confirm the impression he had that the Association would be responsible for the establishment of Boards of Reference, and that the Boards would compile and maintain the register. It was assumed, the Minister stated, that the register would refer to the branch of medicine or surgery in which the practitioner was specializing. The General Secretary reported that he had sent the Minister's letter

to the Branches. The Queensland Branch had replied that it was in favour of supporting the two points raised by the Minister. The New South Wales Branch had expressed the opinion that the definition of a specialist should be incorporated in the *National Health Act* and that the Boards of Reference should be established by the Minister for Health. The Victorian Branch had replied in the negative to the first point raised by the Minister, and in the affirmative to the second. It also expressed the opinion that the Federal Council should be asked to reconsider the matter of the definition of a specialist in view of the difficulties which had become apparent. At a meeting of the Victorian Branch Council, reference had been made to the difficulties foreseen in regard to the second clause of the Federal Council's definition, namely, that a specialist should be defined as a registered practitioner who declared himself to be exclusively engaged in the practice of a particular branch of medicine or surgery at a stated address. The Victorian Branch drew attention first of all to the position in country areas where it was necessary for a doctor to carry on general practice, as well as a specialty, because the field of the specialty was very limited. In the second place, it referred to the position of a specialist such as a psychiatrist who might find it necessary to treat a patient for a medical complaint as well as a psychiatric one. In the third place, the position in a group practice should be considered, where one or more of the members held higher degrees and specialized in a particular specialty as well as carrying on general practice. The fourth point to be considered was the case of a specialist who had previously been in general practice and who was requested by an "old patient" to treat him for a disability other than that in which the doctor specialized. The fifth point was the case of a recognized specialist with city consulting rooms and a suburban general practice; the Council asked whether he was to have no status in his specialty at the suburban address. The South Australian Branch had replied that it approved of both the proposals contained in the Minister's letter. The Western Australian Branch reaffirmed its opposition to the provision by the Association of a definition of a specialist, and it did not support the two points raised by the Minister in his letter. The Western Australian Branch asked what would the position be of a practitioner whose qualifications were satisfactory in accordance with the Federal Council definition, but whose specialist status was not recognized by a State authority. The Tasmanian Branch was in accord with the two matters raised in the Minister's letter. It was pointed out in discussion that what the Minister required was a list of specialists which could be used in the matter of the payment of medical benefits to patients under the provisions of the *National Health Act*. The General Secretary pointed out that the only way of dealing with the matter was to appoint composite committees in each State, but that before that was done it would be necessary to obtain legal opinion. After further discussion, the Federal Council resolved to seek advice in relation to the legal responsibility involved in drawing up a list of specialists for the purpose of the *National Health Act*. It also decided that if a favourable legal opinion was obtained, the Federal Council should advise the Branch Councils to draw up with the cooperation of the appropriate bodies a list of specialists for the purpose of the Act. It also thought that Branch Councils, in compiling a register of specialists, should be asked to take cognizance of the agreed definition. The Federal Council also resolved that if the legal opinion was unfavourable, the Minister for Health should be advised, and should be asked to set up statutory bodies in each State to compile a register of specialists. The Federal Council resolved that it should set up a Federal Board of Reference for the purpose of determining a list of specialists under the *National Health Act* and for its transmission to the Commonwealth Government. The Federal Board of Reference was to consist of the Vice-President, Dr. A. J. Murray, Dr. E. F. Thomson and Dr. W. F. Simmons.

Payment of Benefits in Respect of Professional Services for which Fees are Charged by a Public Hospital Authority.—The General Secretary reminded the Federal Council of conversations which he had had with an officer of the Department of Health, and of a letter which he had subsequently received from the Minister in May, 1955. This letter had to do with the proposed implementation of a declaration made by him under Section 19 (2) of the *National Health Act*. The declaration provided for the payment of Commonwealth benefit in respect of professional services for which fees were charged by a public hospital authority, when the professional services had been rendered to "(a) a patient who has satisfied a means test and who has received treatment at the out-patients department; (*b*) a patient occupying an intermediate or private bed; (c) a patient who has been referred by a private medical practitioner in his capacity as a private practitioner for a particular service specified by that practitioner, but not including a person classified as a public ward patient; or (*d*) a patient requiring casualty or other urgent attention who has received treatment at the out-patients department". The Minister was anxious to implement the declaration, but before doing so, wished to learn whether the Association was still opposed to the extension of benefits to out-patients who had satisfied a means test. The General Secretary said that at the end of July he had received a further letter from the Minister under date July 27, in which he referred to his previous letter written in May. He wrote that he had received no reply from the Association, and that he proposed to grant benefits for medical services rendered on and after September 1, 1955, to the classes of patients covered in clauses (*b*), (*c*) and (*d*) of the declaration, namely, intermediate or private patients, referred patients and casualty patients. He hoped that with the collaboration of the Federal Council an early settlement of the problems of "means test" out-patients would enable the payment of benefits in such cases to be undertaken at the same time. The General Secretary had replied to the Minister to the effect that he had understood that the late Sir Archibald Collins had personally informed the Minister that he had no doubts that certain parts of the proposal would be unacceptable to the profession, and that accordingly a firm decision on the whole proposal could not be made until after the Federal Council met in August. The Federal Council discussed the matter at some length and resolved as follows:

> That the Federal Council disapproves strongly of any proposal to pay medical benefits to a patient attending the out-patient department of a public hospital, where he has satisfied a means test and of whom a charge has been made.
>
> That no objection is raised to the payment of a medical benefit to a patient occupying an intermediate or private bed, provided that a fee is charged and received by a medical practitioner and not by a hospital authority.
>
> That the proposal to pay a medical benefit to a patient who has been referred by a medical practitioner in his capacity as a private practitioner for a particular service specified by that practitioner, but not including a person classified as a public ward patient, be opposed, except where the service is not available from a private practitioner.
>
> The Federal Council approves of the payment of benefits to a patient requiring casualty or other urgent attention, who has received treatment at the out-patient department in the emergency.

Benefit for Blood Counts.—The Federal Council had before it a letter from the Tasmanian Branch asking that the benefit for the making of a red cell count in the examination of the blood, a white cell count, the estimation of hæmoglobin and the examination of a blood film should be increased from six shillings to fifteen shillings. The Federal Council resolved to request the Federal Government to amend the Second Schedule under the *National Health Act* by the deletion of the words "six shillings" in the clause referred to, and the substitution in lieu thereof of a benefit of "fifteen shillings".

Direct Payment to Medical Practitioners.—The General Secretary read a letter which had been received from the Western Australian Branch, drawing attention to the action of the Western Australian Government Railways Employees' Hospital and Medical Benefits Fund, in refusing to depart from the method of direct payment to doctors, and asking for the assistance of the Federal Council in the matter. After discussion, consideration was deferred until the next meeting.

Stabilization of Fees.—A letter was received from the New South Wales Branch, recommending that the Federal Council should review its decision in regard to the stabilization of fees. On February 23, 1953, the Federal Council had adopted the following resolution:

> That the Federal Council, in view of all the available information bearing on the question, is concerned with the need for the stabilization of medical fees, especially in view of the fact that the success of the National Health Service will depend on such stabilization, and requests the Branch Councils to give serious thought to means of achieving this purpose.

The General Secretary read the Federal Council's resolution and the President introduced the subject. He said that the Federal Council could not compel anyone to charge certain fees. Fees were not charged by direction. The Federal Council could merely give advice. This meant, of course, that it had to determine what advice it should give.

One determining factor in the matter had been embodied in the Federal Council's previous resolution, and that was the observation that the success of the National Health Service would depend to a large extent on the stabilization of fees. The Government benefit was fixed, and any variation that had to be made in the refund would have to be made by the medical benefit society. The President thought that a reasonable approach would be such as was made in regard to other occupations in the community. Machinery might be created by the fixing of a basic figure, and Branch Councils should then be asked to indicate what variations they thought should be made from it. On the motion of Dr. A. J. Murray, seconded by Dr. W. F. Simmons, the New South Wales suggestion that the previous decision of the Federal Council should be reviewed was carried.

Dr. D. E. Copping agreed that the matter was bound up with the National Health Service, the success of which was dependent on it. For this reason, it was essential to achieve some stability. Most important was the fact that the good name of the profession had to be safeguarded. Dr. A. E. Lee said that it was one thing for Branch Councils to make decisions, but it was quite a different thing to have those decisions implemented. After further discussion, the Federal Council resolved that, having reconsidered its resolution of February 23, 1953, and having discussed the present economic status of doctors generally, it reaffirmed its previous resolution and requested Branch Council's to act in accordance therewith. The Federal Council also decided to request Branch Councils to consider the question of stabilization of fees, and to ask them to approach the matter with the following principles in view: (i) That the base line for the State be determined as a starting point for subsequent adjustment. (ii) That adjustments should be based on known variations in the cost of living, the value of the pound, the incidence of taxation and their impact on conditions of practice. (iii) That adjustments on a haphazard basis should be discouraged. (iv) That efforts should be made to maintain a relationship between medical fees and the benefits received by the public under the National Health Service, which would ensure that the popularity of the National Health Service would be maintained. The Federal Council further resolved that Branch Councils should be advised to inform all local associations and specialist groups that no decisions by them concerning modifications of fees should be implemented until the Branch Council had been informed of the matter and given its approval. Finally, the Federal Council decided that Branch Councils should be advised to inform all local associations and specialist groups that in the interests of solidarity no information concerning the profession should be made available to the lay Press by any other source than the Branch Council.

Medical Services Committee of Inquiry.

Payment of Travelling Expenses.—The Federal Council had before it a letter which had been received from the Queensland Branch, recommending that provision should be made to defray the travelling expenses of medical practitioners appearing before Medical Services Committees of Inquiry when exonerated and when the payment was recommended by the committee or alternatively that such expenses should be deductible for income tax purposes. The General Secretary said that the letter had been submitted to the Branches and that replies had been received. The New South Wales Branch supported the first part of the view of the Queensland Branch. The Victorian Branch and the South Australian Branch also supported the first part of the Queensland view. The Western Australian Branch agreed with the proposal of the Queensland Branch, unless the case had been previously considered by the committees before the person involved was required to appear before the committee in person. The Tasmanian Branch supported the view of the Queensland Branch. The Federal Council resolved that the Commonwealth Government should be requested to defray the travelling expenses of medical practitioners appearing before Medical Services Committees of Inquiry when such payment was recommended by the committee.

Reprimand of Medical Practitioners.—The General Secretary reported that he had received from the Director-General of Health a copy of the Notice of Reprimand under Part 4 of the *National Health Act*, 1953, in respect of Dr. Noel Louis Fox, of Broken Bay Road, Ettalong, New South Wales, and Dr. Aubrey George Bennett, of 76 Charters Towers Road, Townsville, Queensland.

Federal Medico-Pharmaceutical Liaison Committee.

The General Secretary reported that he had received from the Pharmaceutical Association of Australia a letter suggesting that a meeting of the committee be called, and that the constitution of the committee be altered so as to provide that the pharmaceutical representatives should be the executive of the Association, *plus* the Federal President of the Guild and a representative to be nominated by the pharmaceutical organizations in New South Wales. The letter had been sent to the Branches and replies had been received. In every instance the replies had rejected the proposal of the Pharmaceutical Association of Australia. The General Secretary said that he had replied to the Pharmaceutical Association that its suggestions did not meet with approval. The Secretary's action was approved.

Dr. A. W. Morrow was appointed the representative of the Federal Council on the Federal Medico-Pharmaceutical Liaison Committee to fill the vacancy caused by the death of Sir Archibald Collins.

Hospital Policy.

The General Secretary reported that he had received from the South Australian Branch a letter forwarding a resolution adopted at a conference between representatives of the honorary medical staffs of the four main metropolitan public hospitals in South Australia and representatives of the National Health Service Subcommittee of the Branch Council. The resolution was to the effect that all insured patients in public hospitals should pay for medical attention. The letter had been forwarded to the Branches and replies had been received. The Queensland Branch had replied that it did not agree with the resolution of the South Australian Branch, but thought that the matter should be approached on the basis of the application of the means test, rather than merely on the basis of insurance. The New South Wales and Victorian Branches supported the views of the South Australian Branch. The Tasmanian Branch desired clarification of the term "medical attendant" before it was in a position to send a reply. The Western Australian Branch replied that it considered the intentions behind the South Australian resolution to be in many ways highly desirable. At the same time, there were a number of problems associated with the proposal, and it desired the Federal Council to give a lead on the matter. The problems concerned were (*a*) the training of junior resident medical officers and nurses; (*b*) the training of students; (*c*) the hospitalization of the new intermediate class thus created, and the method of collecting and distributing private fees; (*d*) the proportion of private fees which were given to the hospital for services rendered by junior resident medical officers; (*e*) the maintenance of the principle of free choice of doctor in intermediate wards of public hospitals. In the discussion, the General Secretary pointed out that this question had come up to the Federal Council on previous occasions. It was a big problem in New South Wales and the Branch Council was trying to secure agreement on it. Dr. C. O. F. Rieger said that the South Australian Branch was trying to implement the Federal Council's policy. In South Australia there was no means test, and the members of the profession objected to financial patients occupying public beds in hospitals. He moved in terms of the South Australian letter. Dr. A. E. Lee and Dr. Harold Horn did not agree with the motion. Dr. W. F. Simmons said that each State had a problem peculiar to itself. Dr. T. Y. Nelson referred to a staff fund to which payments from patients treated in public wards could be made to staff members. After further discussion the Federal Council adopted an amendment which became the substantive motion stating that in the opinion of the Federal Council, where patients in a public hospital failed to satisfy a means test, they should pay for their medical attention, and that in assessing a patient's means, the extent of his voluntary insurance against the costs of medical care should be taken into consideration.

The General Secretary read a resolution which had been received from the Part-Time Medical Officers' Association of Queensland. The Queensland Branch had forwarded this resolution, which was as follows: "That this staff confirms that the terms and conditions of service of the part-time staff of the Brisbane Hospital are so defective that they should never form a pattern for any wider extension of similar services." The communication was received.

Advisory Committees.

A communication was received from the Victorian Branch, requesting that the Federal Council should press for adequate payment of members of advisory committees. The Federal Council resolved that this should be done.

The Federal Council also resolved that the executive officers of the Federal Council should be empowered to draw up a scale of fees for the payment of medical members of Commonwealth committees for submission to the Branches.

Health Education.

The Federal Council had before it a communication from Dr. David Roseby, a representative of the Preventive Medicine Section of the Victorian Branch, who had attended the Commonwealth Government Seminar in Health Education at Canberra. Dr. Roseby forwarded a copy of the resolutions adopted by the medical delegates at the Health Seminar. This seminar and the resolutions were described in a report in THE MEDICAL JOURNAL OF AUSTRALIA of May 14, 1955. A leading article was also published in the same issue, and in this views similar to those expressed by Dr. Roseby were stated.

PUBLICITY COMMITTEE.

Dr. W. F. Simmons, Dr. H. R. R. Grieve, Dr. A. E. Lee, Dr. L. R. Mallen, Dr. A. J. Murray and Dr. C. H. Dickson were reappointed members of the Publicity Committee.

BRITISH MEDICAL ASSOCIATION.

The General Secretary reported that a request had been received from the London office of the Association, asking for a copy of the Stoller Report. This had been sent.

A communication had been received from the Central Council, advising that it had been decided to award to Sir Henry Newland the Gold Medal of the British Medical Association. This, the General Secretary stated, would be presented to Sir Henry Newland by Dr. A. Talbot Rogers on the evening of Thursday, August 25, prior to the delivery of the Henry Simpson Newland Oration at the Great Hall of the University of Sydney by Dr. Louis Bauer. It was resolved that the Federal Council should offer its congratulations to Sir Henry Newland on the award of the Gold Medal of the British Medical Association.

BRITISH COMMONWEALTH MEDICAL CONFERENCE.

The Federal Council had before it a report by Dr. Robert Southby of the British Commonwealth Medical Conference, held at Toronto, Canada, on June 14 to 16, 1955. The Federal Council passed a motion thanking Dr. Robert Southby and congratulating him on his report of the conference.

NATIONAL HEALTH AND MEDICAL RESEARCH COUNCIL.

The General Secretary reported that he had received the usual letter from Dr. W. F. Simmons, the Federal Council's representative on the National Health and Medical Research Council, asking whether the Federal Council or the Branches desired any special items to be put on the agenda of the meeting which was to be held on May 19 to 20, 1955.

Dr. W. F. Simmons had forwarded a report of the May meeting of the National Health and Medical Research Council. This was received by the Federal Council and Dr. Simmons was thanked for his report.

COMMONWEALTH DEPARTMENT OF HEALTH.

Erythromycin.

The General Secretary said that he had received from the Victorian Branch a copy of a letter received by it from a member, stating that although recommendations had been made to the National Health and Medical Research Council in 1953 and again in 1954 that distribution of erythromycin should be restricted to hospitals, that information had not been widely promulgated. The writer went on to remark that it had been reported in THE MEDICAL JOURNAL OF AUSTRALIA of March 26, 1955: "The Director-General pointed out that there was no legal authority for their controlling the use of erythromycin, which was being freely supplied to retail pharmacists." In actual fact the Commonwealth did restrict the distribution of the drug by granting import licences only on conditions that it was supplied to hospitals. The writer of the letter thought that the information to which he referred should be distributed more widely. The General Secretary said that he had replied to the effect that the Federal Council had not been informed that erythromycin was restricted to hospitals; the drug was now produced in several countries, and there was no power to control its use. Dr. N. E. Gollan pointed out that the drug was not on the free list, and that it was very expensive. Dr. Harold Horn said that what was needed was education of the profession—this had not gone far enough. He thought that an appeal should be made to the Branch Councils to disseminate information about it. In Queensland, hospitals were using the drug. The President said that he thought the use of the drug was largely confined to hospitals. The communication was formally received.

Antibiotics and Sensitivity Tests.

The General Secretary said that a letter had been received from the Secretary of the Pharmaceutical Benefits Advisory Committee, dealing with the use of sensitivity tests to micro-organisms to antibiotics. The committee commended the carrying out of sensitivity tests, but considered that wider use should be made of existing facilities. It also thought that an extension of the facilities was desirable, and that hospitals and other authorities possessing suitable laboratories should make such facilities available for the carrying out of these tests. The committee believed that if the sensitivity tests were carried out, a considerable saving in the use of the higher priced antibiotics might be effected. The committee realized that the subject had been brought to the attention of the medical profession on a previous occasion, but thought that the time was opportune for a renewal of the educational campaign in regard to antibiotics. The General Secretary read a copy of a letter received from the South Australian Branch on this matter, in which it recommended that the question of the Government paying the full cost involved in these tests should be taken up with the Minister for Health as soon as possible. The South Australian letter had been sent to the Branches and replies had been received. No support was received by any of the Branches to the South Australian Branch proposal. The correspondence was noted.

International Conference of Pædiatrics.

The General Secretary reported that he had received from the Director-General of Health a notice that the Eighth International Conference of Pædiatrics would be held at Copenhagen on July 22 to 27, 1956.

International Course on Tomography.

The Director-General of Health had also forwarded the copy of a notice that the Third International Course on Tomography would be held by the Radiology Institute of the University of Genoa on October 3 to 12, 1955.

Pethidine.

A request was received from the Director-General of Health, that consideration should be given to the sponsoring of a joint inquiry, possibly by means of a special committee, with a view to ascertaining the reasons for the increase in the prescribing of pethidine. The consumption of pethidine had increased considerably during the past five years. There had been no proportionate reduction in the consumption of morphine. Allegations had been made by State health authorities and by individuals that pethidine was being grossly abused by the medical profession, and these statements appeared to have some substance. The Director-General thought that the explanation might lie in the wastage attending the habitual prescription of the maximum number of tablets permitted under the *National Health Act* as a benefit. It might also be, as had been alleged on numerous occasions, that pethidine was being prescribed as an alternative to simpler analgesics and hynotics which were not pharmaceutical benefits. The Commonwealth Department of Health was being embarrassed by the apparent abuse of pethidine, because on the one hand of its national responsibility to the United Nations Organization, and on the other because the allegation was made that overuse derived from the inclusion of this hypnotic as a pharmaceutical benefit. In the discussion, Dr. Harold Horn pointed out that pethidine was extensively used in obstetrics, and he thought that this might possibly be part of the explanation. Dr. J. B. G. Muir said that any investigation undertaken should be carried out by the members of the practising profession. He referred to the investigation into heroin in England, and said that the agitation against its use was started by government departments. Dr. A. J. Murray supported Dr. Muir, and agreed that pethidine was used to considerable extent in obstetrics. Dr. W. F. Simmons was in favour of the formation of a committee, and thought that the investigation should include both oral and instrumental use of the drug. Any investigation undertaken should be carried out by top line men, and the selection should not be left to the Government. The General Secretary read a letter which had been received from the World Medical Association. The letter came originally from the World Health Association. In this letter it was stated that the Expert Committee on Drugs Liable to Produce Addiction considered that an important factor in the development of pethidine addiction, not only in the United States of America, but also in other countries, had been the attitude of physicians towards the drug, based upon the widespread belief that it was less dangerous than morphine. The Expert Committee was con-

vinced that experience with the drug was contrary to this belief. It was of the opinion that pethidine was as dangerous as morphine as a potential addicting agent, that its use should be undertaken only with full realization of its dangers, and that its administration should be approached with the same attitude and attended by the same precautions as were recognized for morphine. Dr. L. R. Mallen said that the matter had been considered by the South Australian Branch, which agreed that there was already some addiction to the drug. The President said that if a committee was to be formed, the Federal Council should be represented on it. The Federal Council resolved to give official sponsorship to the setting up of a joint committee with the Commonwealth Department of Health in regard to the prescribing of pethidine. It left the appointment of representatives of the Federal Council on the joint committee in the hands of the executive officers.

World Medical Association.

The General Secretary reported that he had received the minutes of the 23rd Session of the Council of the World Medical Association, held at Dublin, Ireland, and also the minutes of the meeting held a few days later. He had also received the agenda for the 25th Session of the Council.

The General Secretary referred to the Ninth General Assembly of the World Medical Association, which was to be held at Vienna on September 20 to 26, 1955. He had received a copy of the provisional agenda and several documents for consideration. He had also received a report of the Social Security Committee. He said that apart from Dr. L. R. Mallen, who would be attending the meeting, two observers had been appointed—Dr. Stephen Benedek, of New South Wales, and Dr. H. D. Steward, of Victoria. The Secretary's action in this matter was approved.

The General Secretary had received an announcement of the sixth annual meeting of Medical Journalism, to be held at Vienna on September 23, 1955, together with a copy of the agenda. There would be no representative from Australia at this meeting.

The General Secretary referred to the supporting committees of the World Medical Association, and said that he had received copies of the joint financial report of the Australian and Canadian committees. He said that the following contributions had been received: New South Wales, £500; Queensland, £67 11s.; South Australia (second contribution), £219 7s. This made a total of £939 18s. A total sum of £1100 had already been contributed.

The General Secretary referred to several newsletters received from the Secretary-General of the World Medical Association, and said that copies had been sent to the Branches.

The General Secretary referred to the Code of Medical Ethics, which was being discussed by the World Medical Association. He could see no reason for alteration of the code.

The General Secretary said that members of committees had been appointed by the Branches to examine and report upon the proceedings of the First World Conference on Medical Education. The New South Wales Branch had forwarded its report. When all the reports were received, they would be coordinated and a final report made for Australia.

The General Secretary referred to the World Health Organization and to the representation of national medical associations on delegations to the World Health Organization Assemblies. He said that the matter was still being discussed with the Minister for Health.

Repatriation Department.

Consideration was given to fees payable for attendance on widows, widowed mothers and orphans of the 1914-1918 and the 1939-1945 wars, to the fees payable to local medical officers, to the fee for consultation at a specialist's room, and to the fees payable to visiting medical officers. The General Secretary said that the Treasury view was that consideration of the requests for increases in fees should be deferred until the Arbitration Court had made a decision regarding salary increases for Repatriation Department medical officers. The Federal Council resolved that further urgent and strong representation be made to the Minister for Repatriation, and that he be informed that failing compliance with the request of the Federal Council by October 31, 1955, members of the profession would be advised to terminate their appointments with the Repatriation Department.

A Conference on the Conditions of Service to Visiting Medical Officers of Repatriation Department Hospitals.

At the previous meeting of the Federal Council, it was decided to invite representatives of The Royal Australasian College of Physicians, of the Royal Australasian College of Surgeons and of the salaried members of the staffs of repatriation hospitals to a conference, with a view to the devising of means of improving the efficiency of repatriation hospitals, and that a report of the conference should be forwarded to the Branches for their consideration. The General Secretary said that a conference with The Royal Australasian College of Physicians had been held on April 21, 1955. The College had forwarded a memorandum on the conditions of appointment of visiting medical officers. The Federal Council discussed the clauses of this memorandum *seriatim*. With one or two minor alterations the report was approved. The decisions arrived at are as follows.

In the first place, the Federal Council approved of the recommendation that the medical services in the Department of Repatriation should be reorganized.

The second recommendation was slightly altered so that it would read as follows: "That this reorganization should follow along the lines at present accepted in the teaching hospitals, with the appointment of consultants, specialist visiting medical officers graded by seniority, and resident medical officers of whom only a very small proportion should be permanent, and that provision should be made for a twenty-four hour pathological and X-ray service, and opportunities provided for research work."

Approval was given to the third recommendation, which is as follows: "That the visiting medical officers should be given authority and responsibility for the medical care of patients and not as at present be asked only to advise and assist."

The fourth recommendation which was approved is as follows: "That the remuneration to visiting medical officers should be in keeping with their professional status and commensurate with the services rendered."

Recommendation 5 (*a*) was approved as follows: "That for out-patient and in-patient sessions at repatriation hospitals or clinics, sessional remuneration should be at the rate of four guineas for the first hour, *plus* one guinea for each succeeding half-hour or part thereof, up to a session of four hours, and that in addition the existing scale of travelling allowances should obtain."

Recommendation 5 (*b*) was approved as follows: "That where a consultant or specialist is asked by the Department of Repatriation to visit a patient in the metropolitan area, a minimal fee of five guineas for the visit be paid, and where the distance from the General Post Office is greater than five miles, and less than ten miles, the fee be seven guineas, and where the distance is more than ten miles, and less than fifteen miles, the fee should be ten guineas."

Recommendation 5 (*c*) was approved as follows: "That where a patient is seen in the consultant's own consulting rooms, the fee for examination and report, which is now £2 10s., be four guineas, and the fee which is now one guinea be two guineas."

Assessment Appeal Tribunals.

At its meeting in August, 1954, the Federal Council considered fees payable to medical officers of Assessment Appeal Tribunals. It was held that the fee of five guineas was inadequate, and it was resolved that a request should be made for an increase of the fee to ten guineas. At the last meeting of the Federal Council in February, 1955, it was decided that no further action should be taken. The General Secretary said that he had received further requests for action from the New South Wales Branch, asking for a fee of ten guineas, and from the Queensland Branch, asking for a fee of twelve guineas. At the conference of representatives of the Federal Council and of the Royal Australasian College of Surgeons regarding conditions of service of visiting medical officers, Repatriation Department medical officers, the matter of rates of payment of medical officers of Assessment Appeal Tribunals was also considered. It was agreed that the rates of payment of the latter should be the same as those of visiting medical officers, and representations to that effect were made to the Chairman of the Repatriation Commission.

Salaried Medical Officers.

A letter was received from the Repatriation Department Medical Officers' Association, thanking the Federal Council for its generous act in donating the sum of £500 towards

the cost of the appeal by the Association to the Commonwealth Arbitration Court in the matter of salaries. A decision of the Arbitration Court was being awaited.

The General Secretary reported that on behalf of the medical officers of the Repatriation Department, an approach had been made to the Department that its medical officers should be allowed to attend meetings of the Australasian Medical Congress (British Medical Association) without loss of pay.

Superannuation for Self-Employed Persons.

At its meeting in February, 1955, the Federal Council had approved the seeking of the establishment of a scheme for superannuation for self-employed persons in Australia. Dr. Colin Anderson said that a scheme was at present operating in Western Australia. The Federal Council had also appointed Dr. H. C. Colville, Dr. C. Byrne and Dr. R. Southby a committee to confer with other professional organizations with a view to an approach being made to the Federal Treasurer in the matter of seeking the establishment of a scheme of superannuation of self-employed persons in Australia. The Federal Council had before it a letter signed by the President of the Law Council of Australia, by the Vice-President of the Federal Council and by the Vice-President of The Institution of Engineers of Australia. The letter was addressed to the Commonwealth Treasurer. In the letter, the arguments for the establishment of such a scheme were set out. In the last paragraph of the letter, it was stated that if a professional man was permitted to contribute a fixed percentage of his annual professional income to a fund set up and administered by his professional body, it would go a long way towards solving the present problem. The fact that his annual contribution would be fixed by reference to a percentage of his income was of extreme importance, since it would permit him to increase his provision for his old age as his income increased and he was best able to afford that provision. So far no reply had been received from the Treasurer.

Department of Labour and National Service.

At the previous meeting of the Federal Council, a letter was received from the Department of Labour and National Service, inquiring whether a fee of one guinea would be satisfactory to the medical profession for the provision of clinical notes regarding the classification of a registrant for national service purposes. After reference to the Branches, the Federal Council decided on that occasion that a fee of one guinea would be adequate. The General Secretary said that he had now received a letter from the Department in which it was stated that some specialists thought that they should be paid a fee of two guineas rather than one guinea. The General Secretary said that this letter had been referred to the Branches and they had all decided that the decision of the previous meeting should stand. The Council therefore adopted a motion reaffirming its previous resolution.

Department of Social Services.

The General Secretary reported that the Department of Social Services proposed to form a Rehabilitation Advisory Committee and that it had asked the Federal Council to nominate a representative. The Federal Council had nominated Dr. Selwyn Graham Nelson, of Sydney.

Reference was also made to the fee for examination of pensioners under the Department. It was pointed out that this was another matter in which no decision would apparently be made until after the Arbitration Court had given its decision in the appeal of the Repatriation Medical Officers' Association.

Department of the Army.

Reference was made to the fees for area medical officers attached to the Commonwealth Military Forces, and to the fees payable to civil medical practitioners. It was pointed out that this was a matter for the Treasury.

Rehabilitation Services.

The Federal Council had before it a letter from the Western Australian Branch, making a request that the subject of rehabilitation, at both a Commonwealth level and a State level, should be discussed by the Federal Council. The Western Australian Branch Council was concerned with the position in Western Australia which was becoming apparent with the widening of the scope of rehabilitation within the Department of Social Services, and also the entry of the State Medical Service into the field of rehabilitation, and efforts in this field were being made by some of the voluntary agencies operating homes and centres for teaching. The Council felt that the Federal Council should lay down a policy, if it was possible to do so, regarding the future structure of rehabilitation services throughout the Commonwealth. The General Secretary said that this letter had been sent to the Branches, and replies had been received. The Queensland, New South Wales and Victorian Branches left the matter in the hands of their delegates after they had heard the discussion. The South Australian Branch, although it was reasonably satisfied with the manner in which rehabilitation services were conducted in South Australia, had no objection to the matter being discussed at the Federal level. The Tasmanian Branch thought there should be the closest liaison between practitioners and the rehabilitation officer. The Federal Council therefore resolved that in its opinion the medical rehabilitation of handicapped persons was essentially the responsibility of the medical profession. It resolved that in its opinion the rehabilitation services in Australia should be coordinated and integrated. It also resolved that the existing situation in regard to rehabilitation in Australia should be discussed with the Minister for Social Services.

Australian Hearing Aid Importers and Distributors.

The General Secretary reported that he had received a communication regarding the proposed formation of a trading association of hearing aid importers and distributors. The Federal Council was asked for advice and also wished to have information about rules and regulations of the Association. The General Secretary said that the matter had been referred to the Oto-Rhino-Laryngological Association of Australia (British Medical Association), and its views in regard thereto were awaited.

Federal Council Medical Monograph Fund.

The General Secretary reported that the Federal Council Medical Monograph Fund at August 16, 1955, stood at £2398 7s. 2d.

The Federal Council appointed Dr. E. F. Thomson to be a trustee of the Federal Council Medical Monograph Fund to replace the late Sir Archibald Collins.

Workers' Compensation Acts.

A communication was received from the Western Australian Branch submitting that no reason existed for charges for consultations and visits to be less than those normally charged for private patients insured with benefit societies. The matter had been referred to Branch Councils. After discussion, the Federal Council resolved that no good reason existed for the continuation of concessional rates of payment for the treatment of injured workers under *Workers' Compensation Acts*.

Special Groups.

A request was received from Dr. Selwyn G. Nelson, the Honorary Medical Director of the Australian Rheumatism Council, for the formation of a special group for the study and treatment of rheumatic diseases, the group to be called the Australian Rheumatism Association. It was resolved that approval of the Federal Council should be given to the formation of such a group.

Date and Place of the Next Meeting.

The date and place of the next meeting was left in the hands of the President.

Votes of Thanks.

The Federal Council passed a vote of thanks to the Council of the New South Wales Branch for its hospitality and for the accommodation provided for the meeting. It also thanked Dr. A. J. Murray, Dr. W. F. Simmons and Dr. T. Y. Nelson for their hospitality.

The Federal Council extended the thanks of the meeting to Dr. J. G. Hunter and Miss H. Cameron for their services during the meeting.

The Federal Council accorded a vote of thanks to the President, Dr. H. C. Colville, for presiding.

Out of the Past.

In this column will be published from time to time extracts, taken from medical journals, newspapers, official and historical records, diaries and so on, dealing with events connected with the early medical history of Australia.

A CURE FOR CANCER.

[From the *New South Wales Medical Gazette*, November, 1871.][1]

OUR experience teaches us that this disease has lately increased in New South Wales and that the young and strong succumb much more rapidly to its assaults than those "whose ways of life have fallen into the sere and yellow leaf" and who in the natural course of events would not live many years. In another part of this issue we publish an account of "some cases of cancer treated with Condurango by Dr. D. W. Bliss of Washington" extracted from the New York Medical Journal of July: a chemical analysis of the bark is also given but no botanical description of the plant nor is there any mention made of the family to which it belongs: he states that all his patients are improving under the exhibition of a decoction of the bark of this tree taken internally and he confidently predicts a favourable issue to the cases thus treated. We all know however the great advantage that faith in the remedies employed has on the patients using them and as "hope springs eternal in the human breast" invalids may derive a temporary benefit from a remedy said to be a certain "cure for cancer" in the same way as did the poor creatures who formerly touched His Majesty's hand for various scrofulous complaints known as the King's evils and those who confide in Sedgwick Cowper's kerosene cure: and before we can believe in the efficacy of the Condurango, we must know something of its "modus curandi".

The analysis of the bark points to no alkaloid supposed to possess medicinal virtues, and as its health giving properties must be contained in either the yellow resin or the extractive matter which is highly improbable we are inclined to the belief that the virtues said to be possessed by it are apocryphal. We believe that at some future period should the progress of medical science advance at the same quick march that it has during the last century, not only will a preventive to the advent of cancer similar to vaccination against "Variola" be found but that also a specific remedy for the disease similar to Cinchona in intermittent fever will be discovered by some keen investigator of Nature and her laws as laid down by the Almighty Ruler of the Universe. Until then, we feel assured quackery will always find as it has heretofore done, a "cure for cancer" one of its most profitable impositions on the weaknesses of humanity.

[1] From the original in the Mitchell Library, Sydney.

Correspondence.

STANDARDIZATION OF HOSPITAL FORMULARIES.

SIR: The recently published Australian Pharmaceutical Formulary (A.P.F.) represents an immense advance upon previous editions. The formulæ have been modernized and provide the basic requirements for medical practice.

In the past, most teaching hospitals have compiled their own formularies or hospital pharmacopœias, but there were no particular attempts at standardization, and the minor differences existing between them have been a nuisance. It would reduce much confusion for prescribers, pharmacists and patients if formularies were standardized. This in no way suggests that any hospital should not be able to compile its own formulary, but the present differences are to be deplored.

The Victorian Eye and Ear Hospital has now adopted the Australian Pharmaceutical Formulary as its basic formulary, but will issue a small supplement containing additional formulæ required for its special treatments. The supplement can be reviewed much more quickly than the previous pharmacopœia. As the Australian Pharmaceutical Formulary is expected to be published every four years, it should be possible to keep formulæ reasonably in accord with medical and pharmaceutical practice. It is hoped that other hospitals will cooperate to achieve the desired standardization. There is an Australian Pharmaceutical Formulary committee appointed by the Pharmaceutical Society in each Australian State, and these committees would like to receive suggestions for improvements or additions to any of the formulæ. Published formulæ must always be regarded as subject to improvement or replacement according to the changes in practice of medicine or pharmacy, but the time has arrived for cooperation on a national instead of institutional level.

Yours, etc.,

RONALD LOWE,
Ophthalmic Surgeon, Victorian Eye and Ear Hospital.

82 Collins Street,
Melbourne,
September 2, 1955.

MUSCULAR DYSTROPHY ASSOCIATION (SOUTH AUSTRALIA).

SIR: In South Australia in July, 1954, a group of patients and persons interested in muscular dystrophy formed an Association in which there is a panel of three doctors. The approximate membership of the Association is 45. The aims of the Association are (i) to ascertain the whereabouts of all patients in Australia with this condition, so that they may be accessible should patients be needed for experimental treatment or should any successful treatment become available, and (ii) to ascertain the actual social needs of these patients with a view to assisting them if and when necessary. It is hoped that in time there may be branches of the Association in each State with a representative Federal Executive Council. To this end, we should be very grateful if individual doctors would inform their patients of the existence and aims of this Association.

Yours, etc.,

(MRS.) BARBARA FORDHAM,
Honorary Secretary.

23 Albany Crescent,
Oaklands Park,
South Australia.
July 29, 1955.

ADVERTISEMENTS AND SAMPLES FROM DRUG HOUSES.

SIR: As a recently retired medical practitioner, I feel I can write dispassionately about what I consider a great nuisance. I refer to the numerous advertisements and samples from drug houses which plague the already harassed and busy doctors. After a few years in practice most of us cast most of this material into the rubbish basket unopened. However, sometimes we feel we may be missing something and stuff them into crowded drawers to be read at our leisure—a circumstance which rarely eventuates. This creates just as acute a problem as how to get rid of used razor blades. May I say that most doctors welcome the travellers' visits, knowing that we frequently learn something of importance. Unfortunately I am still on the mailing list of a number of the drug houses; I would like them to erase my name so that I can relax in this rural peace.

Yours, etc.,

LEO LOORHAM.

Christmas Hills,
Victoria,
September 3, 1955.

A THYROID BLOCKING AGENT AS A CAUSE OF ENDEMIC GOITRE IN TASMANIA.

SIR: The demonstration by Dr. F. W. Clements of a thyroid blocking agent in Tasmanian milk (M. J. AUSTRALIA, September 3, 1955) is an exciting development. Greer and Astwood (1948) had previously shown that the ingestion of large amounts of raw yellow turnip inhibits iodine uptake by the thyroid gland in man. But cooking the vegetable destroyed its goitrogenic effect. Therefore their observation was of only academic interest as far as the pathogenesis of endemic goitre was concerned.

Now as the result of Dr. Clements's work we can cite an example of goitrogenesis on a State-wide basis deriving from the ingestion of an item of food in normal quantity. All those interested in goitre and public health problems will wish to congratulate him on the excellence of his results.

Yours, etc.,

FRANCIS F. RUNDLE.

The Royal North Shore Hospital of Sydney,
September 13, 1955.

AUSTRALASIAN MEDICAL CONGRESS (BRITISH MEDICAL ASSOCIATION).

SIR: May I, as somewhat of a mere onlooker and outsider, congratulate all concerned with the organization of the recent British Medical Association Congress? The handbooks and the arrangements generally must have entailed an enormous amount of work behind the scenes.

Yours, etc.,

F. J. BROWNE, M.D.,

Sydney,
August 29, 1955.

Naval, Military and Air Force.

APPOINTMENTS.

THE undermentioned appointments, changes *et cetera* have been promulgated in the *Commonwealth of Australia Gazette*, Number 39, of August 18, 1955.

NAVAL FORCES OF THE COMMONWEALTH.

Permanent Naval Forces of the Commonwealth (Sea-Going Forces).

Confirmation in Rank.—Surgeon Lieutenant (for Short Service) (on probation) Brian Tremayne Treloar is confirmed in the rank of Surgeon Lieutenant (for Short Service), with seniority in rank of 2nd June, 1954. Surgeon Lieutenant (for Short Service) (on probation) (Acting Surgeon Lieutenant-Commander) Robert Arthur Franklin is confirmed in the rank of Surgeon Lieutenant (for Short Service), with seniority in rank of 15th June, 1954.

Citizen Naval Forces of the Commonwealth.

Royal Australian Naval Reserve.

Appointments.—Haydn Pryce Smith and Sydney Gale Rowe are appointed Surgeon Lieutenants, dated 12th May, 1955, and 16th May, 1955, respectively.

AUSTRALIAN MILITARY FORCES.

Australian Regular Army.

Royal Australian Army Medical Corps.

3/40099 Captain (Temporary Major) J. M. Bradley is transferred to the Citizen Military Forces, Royal Australian Army Medical Corps (Medical), Southern Command, 10th April, 1955.

Citizen Military Forces.

Eastern Command.

Royal Australian Army Medical Corps (Medical).—The provisional appointment of 2/127045 Captain H. M. Learoyd is terminated, 7th March, 1955. *To be Captain (provisionally), 8th March,* 1955—2/127045 Harry Meldrum Learoyd.

Southern Command.

Royal Australian Army Medical Corps (Medical).—To be Lieutenant-Colonel, 21st July, 1954—3/50012 Major (Temporary Lieutenant-Colonel) J. C. Stewart. 3/50227 Captain (Temporary Major) J. M. Bradley is transferred from the Australian Regular Army, Royal Australian Army Medical Corps (Medical), and to be Major, 10th April, 1955, with regimental seniority next before 3/129016 Major J. G. Sloman.

Central Command.

Royal Australian Army Medical Corps (Medical).—To be Temporary Lieutenant-Colonel, 22nd June, 1955—4/31907 Major R. A. Burston.

The undermentioned appointments, changes *et cetera* have been promulgated in the *Commonwealth of Australia Gazette*, Numbers 40 and 41, of August 25 and September 1, 1955.

NAVAL FORCES OF THE COMMONWEALTH.

Permanent Naval Forces of the Commonwealth (Sea-Going Forces).

To be Honorary Physician to the Queen: Surgeon Captain James Martin Flattery, O.B.E., R.A.N.

Confirmation in Rank.—Surgeon Lieutenant (for Short Service) (on probation) Alan William Searle is confirmed in the rank of Surgeon Lieutenant (for Short Service), with seniority in rank of 2nd June, 1954.

Citizen Naval Forces of the Commonwealth.

Royal Australian Naval Reserve.

Appointments.—Thomas Neville Hayes and Arthur Henry Keech are appointed Surgeon Lieutenants, dated 11th May, 1955, and 17th June, 1955, respectively.

AUSTRALIAN MILITARY FORCES.

Citizen Military Forces.

Northern Command.

Royal Australian Army Medical Corps (Medical).—1/33122 Captain (provisionally) J. Bell relinquishes the provisional rank of Captain and is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (Northern Command) in the honorary rank of Captain, 28th June, 1955.

Eastern Command.

Royal Australian Army Medical Corps (Medical).—F2/1075 Captain (provisionally) C. D. Chalmers relinquishes the provisional rank of Captain and is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (Eastern Command) in the honorary rank of Captain, 30th June, 1955. *To be Captain (provisionally), 21st July,* 1955—2/127895 Gerald Allen O'Neill.

To be Captain (provisionally), 11th July, 1955—2/62339 Brian Robert Hanley.

Southern Command.

Royal Australian Army Medical Corps (Medical)—3/101018 Captain W. N. Sloan ceases to be seconded for post graduate studies in the United Kingdom, 19th May, 1955. 3/52296 Captain (provisionally) I. N. Nunn relinquishes the provisional rank of Captain and is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (Southern Command) in the honorary rank of Captain, 1st May, 1955. *To be Major, 5th July,* 1955—3/123415 Captain (Temporary Major) T. J. Walsh.

Central Command.

Royal Australian Army Medical Corps (Medical).—To be Captain (provisionally) and Temporary Major, 20th July, 1955—4/32070 Allan Kerr Grant.

4/43072 Captain (Honorary Major) M. G. Gratton is appointed from the Reserve of Officers, 30th June, 1955.

Western Command.

Royal Australian Army Medical Corps (Medical).—The provisional rank of 5/26459 Captain V. T. White is confirmed. 5/26514 Captain R. Paton is seconded for post graduate studies in the United Kingdom, 1st February, 1955. 5/26518 Captain (provisionally) W. N. Gilmour relinquishes the provisional rank of Captain and is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (Western Command) in the honorary rank of Captain, 25th May, 1955. 5/32261 Captain M. Connaughton relinquishes the temporary rank of Major and is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (Western Command), 1st June, 1955. 5/32078 Honorary Captain J. G. Golledge is appointed from the Reserve of Officers, and to be Captain (provisionally), 27th June, 1955. 4/32003 Captain B. J. Shea is transferred to the Reserve of Officers (Royal Australian Army Medical Corps (Medical)) (Western Command), 15th June, 1955. *To be Temporary Major, 1st June,* 1955—5/10736 Captain G. M. Nunn.

Tasmania Command.

Royal Australian Army Medical Corps (Medical).—To be Major, 24th June, 1955—2/127012 Captain T. W. Horne.

Reserve Citizen Military Forces.

Royal Australian Army Medical Corps.

Northern Command.—To be Honorary Captains, 11th July, 1955—Ian Egerton Cary and Leslie Keith Jobbins.

Southern Command.—The notification respecting Honorary Captain John Hartley Williams which appeared in Executive Minute No. 133 of 1955, promulgated in *Commonwealth Gazette* No. 35 of 1955, is withdrawn.—(Ex. Min. No. 158—Approved 24th August, 1955.)

ROYAL AUSTRALIAN AIR FORCE.

Permanent Air Force: Medical Branch.

Flight Lieutenant (Temporary Squadron Leader) A. V. Coleman (033029) is appointed to a short-service commission, 23rd September, 1955.

The resignation of the following officers is accepted:—Squadron Leader G. A. Leyland (04379), 9th September, 1955; Flight Lieutenants J. J. Bain (0210563), 22nd July, 1955, H. S. Trinder (025593), 29th July, 1955, G. G. Wagner (013706), 22nd September, 1955.

Medical Practice.

DRUG REGULATIONS UNDER THE POLICE OFFENCES (AMENDMENT) ACT.

THE Drug Regulations under the *Police Offences (Amendment) Act* are being amended to provide as follows:

1. That it be mandatory on all licensed and authorized persons under the drug laws to keep a drug register in the form prescribed. Wholesalers have been keeping a variety of records which they were permitted to do because they were also kept for Customs requirements. Authorized persons, too, in certain circumstances, had not previously to keep the actual drug register prescribed, although they have had to keep all relevant details. In the interests of uniformity the mandatory keeping of the one type of register has now been decided upon, and all wholesalers, doctors, dentists *et cetera* will on gazettal of the amended regulations be required to keep such register.

2. That all particulars provided for in the drug register shall be entered up without delay.

3. That the present heading in the drug register "(One only irrespective of strength, to page)" be replaced by "(One drug, of one trade name and one strength only to page"). The old heading has led to some confusion and the new heading should clarify the matter. As regards authorized and licensed persons using the register with the old heading, it will be in order for the use of such register to be continued, provided the amended heading is incorporated where necessary and the particulars kept in accordance with the heading. The requirements of the law will thus be observed.

Arrangements have been made with the Government Printing Office for printing of the amended register. The Government Printer does not anticipate that stocks of the new register will be available until November next, and, consequently, gazettal of the amendments as referred to herein will be held over until then.

POLICE OFFENCES (AMENDMENT) ACT, 1908, AS AMENDED.

THE Under Secretary, Chief Secretary's Department, New South Wales, has advised that the following amendment to the Drug Regulations under the *Police Offences (Amendment) Act*, 1908, as amended, is to be promulgated in the *New South Wales Government Gazette* on September 23, 1955. The amendment deals with the writing of a drug prescription and is designed to overcome a deficiency in the old regulations which a recent court case disclosed.

Chief Secretary's Department,
Sydney.

His Excellency the Governor, with the advice of the Executive Council, has been pleased to amend, in the manner set forth hereunder, the Regulations under the *Police Offences (Amendment) Act*, 1908, as amended.

C. A. KELLY.

Regulation 17 is amended by omitting sub-paragraph (*a*) of paragraph (2) and by inserting in lieu thereof the following sub-paragraph:

(*a*) He shall write such prescription in ink and shall in his own handwriting place on such prescription—

(i) the date on which it is written;

(ii) the name and address of the person for whom it is given;

(iii) the maximum number of times and the intervals at which it shall be dispensed

and sign such prescription. The prescription shall bear the address of such Medical Practitioner or Veterinary Surgeon.

Post-Graduate Work.

SERVICES CANTEENS TRUST FUND POST-GRADUATE SCHOLARSHIPS.

THE trustees of the Services Canteens Trust Fund are inviting applications for two post-graduate scholarships, one for study overseas and the other for study at an Australian university. The fields of study in which the scholarship may be awarded are as follows:

(*a*) For study overseas: (i) any course at any approved university throughout the world; (ii) aeronautics in England and America; (iii) travelling scholarship in any field; an applicant wishing to pursue any other branch of study may apply to the trustees for a scholarship in that field.

(*b*) For study in Australia: Study or research in any approved subject at any Australian university.

The scholarship for study overseas is valued at £A800 *per annum*. The scholarship for study in Australia is valued at £600 *per annum*. Both scholarships will be tenable for a period of up to three years.

The scholarship is open to a child (including step-child, adopted child or ex-nuptial child) of a person who was at any time between September 3, 1939, and June 30, 1947: (*a*) a member of the naval, military or air forces of the Commonwealth; or (*b*) a member of any nursing service or women's service attached or auxiliary to any branch of the Defence Force of the Commonwealth; including (*c*) members of the canteens staff of any ship of the Royal Australian Navy, and any person duly accredited to any part of the Defence Force who served in an official capacity on full-time paid duty.

Selection will be entirely on merit and will be competitive. A scholarship will be granted only to an applicant who, in the opinion of the trustees, has outstanding ability, is of suitable character and is likely to obtain lasting benefit to himself or herself and to Australia by further study. The scholarships will not necessarily be awarded each year. The following will be taken into consideration in determining the award of the scholarships: (i) academic career, (ii) ability for research work, (iii) character, (iv) the future value to Australia of the subject of research selected. The selection each year of the scholars to be awarded the scholarships will be made from all applications received from eligible persons by the prescribed closing dates.

Applications must be lodged with the General Secretary, Services Canteens Trust Fund, Victorian Barracks, St. Kilda Road, Melbourne.

Applications for the scholarship for study overseas close on November 1, 1955. Applications for study in Australia close on January 10, 1956. Application forms and any further information may be obtained from the General Secretary, whose address is shown above, or the Regional Secretary, Services Canteens Trust Fund in each State. The addresses of Regional Secretaries are as follows: Victoria Barracks, Brisbane; 84 Pitt Street, Sydney; Victoria Barracks, Melbourne; 22 Grenfell Street, Adelaide; Swan Barracks, Perth; Anglesea Barracks, Hobart.

THE POST-GRADUATE COMMITTEE IN MEDICINE IN THE UNIVERSITY OF SYDNEY.

Week-End Course at Parramatta.

THE Post-Graduate Committee in Medicine, in conjunction with the Central Western Medical Association, will hold a week-end course at Parramatta on Saturday and Sunday, October 15 and 16, 1955. The programme is as follows:

October 15: 2 p.m., registration; 2.30 p.m., "Injuries to the Urinary Tract", Dr. A. Walker-Smith; 4 p.m., "Infections of the Urinary Tract", Dr. A. Walker-Smith.

October 16: 10 a.m., "Rheumatic Diseases", Dr. A. E. McGuinness; 11.30 a.m., "The Status of Hypertensive Drugs", Dr. A. E. McGuinness; 2 p.m., "Modern Treatment in Psychiatry", Dr. John McGeorge; 3.30 p.m., "The Story of Three Prisoners", Dr. John McGeorge.

The fee for attendance at the course will be £3 3s. Those wishing to attend are requested to notify Dr. C. A. McDermott, supervisor of the course, 8 Carlton Street, Granville. Telephone: YU 1570.

Week-End Course at Newcastle.

The Post-Graduate Committee in Medicine, in conjunction with the Central Northern Medical Association, will hold a week-end course at the Royal Newcastle Hospital on Saturday and Sunday, October 29 and 30, 1955. The programme is as follows:

October 29: 2 p.m., registration; 2.30 p.m. to 5.15 p.m., symposium on "Diseases of the Thyroid Gland", Dr. F. F. Rundle (with Dr. N. Newman and Dr. N. Walker).

October 30: 11 a.m. to 12.45 p.m., symposium on "Contra-indications and Indications for ACTH and Cortisone", Professor Lorimer Dods (with Dr. P. Rundle); 2 p.m. to 3.45 p.m., symposium on "Diseases of the Pituitary Gland", Dr. R. A. Money (with Dr. A. Dawson and Dr. D. Dunlop).

The fee for attendance at the course will be £3 3s. Those wishing to attend are requested to notify Dr. Craig Horn, 17 Bolton Street, Newcastle. Telephone: B 2808.

Additions to the Post-Graduate Film Collection.

The Post-Graduate Committee in Medicine in the University of Sydney announces that the following films have been donated by Imperial Chemical Industries. They have been added to the committee's film collection and are now available on loan.

"A Drug is Born": 16-millimetre, black and white, sound, fourteen minutes; produced by I.C.I. Film Unit.

"Endotracheal Anæsthesia": 16-millimetre, black and white, sound, twenty-six minutes; made with the cooperation of the Department of Anæsthetics, Westminster Hospital, London, 1944.

"Movements of the Tongue in Speech": 16-millimetre, colour, sound, fourteen minutes; an I.C.I. film.

"The Physiology of the Kidney": 16-millimetre, black and white, sound, forty-six minutes; produced by the Pharmacology and Histology Departments, University College, London.

"Principles of the Extraction of Penicillin": 16-millimetre, black and white, sound, twelve minutes.

"Functions of the Carotid Sinus and Aortic Nerve": 16-millimetre, colour, sound, seventy-one minutes, two reels; produced in collaboration with the Department of Physiology, University College, London, by Dr. A. Schweitzer.

The following film has been donated by the United Kingdom Information Office:

"The Multiple Pressure Technique of Vaccination": 16-millimetre, colour, silent, nine minutes; produced by Dr. Brian Stanford.

Royal Australasian College of Surgeons.

PRIMARY EXAMINATION FOR THE F.R.A.C.S.

A PRIMARY EXAMINATION in anatomy (including normal histology) and applied physiology and the principles of pathology will be conducted in Melbourne in March, 1956. The written papers will be held on Thursday, March 8, and Friday, March 9, 1956.

DISEASES NOTIFIED IN EACH STATE AND TERRITORY OF AUSTRALIA FOR THE WEEK ENDED SEPTEMBER 3, 1955.[1]

Disease.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Northern Territory.	Australian Capital Territory.	Australia.
Acute Rheumatism	2	5(3)	3(1)	..	..	..	..	..	10
Amœbiasis	..	..	..	..	..	..	..	..	..
Ancylostomiasis	..	..	..	..	..	..	..	..	..
Anthrax	..	..	..	..	..	..	..	..	..
Bilharziasis	..	..	..	..	..	..	..	..	..
Brucellosis	..	1(1)	..	..	..	..	..	..	1
Cholera	..	..	..	..	..	..	..	..	..
Chorea (St. Vitus)	1(1)	2(2)	..	..	..	..	..	..	3
Dengue	..	..	..	..	..	..	..	..	..
Diarrhœa (Infantile)	13(10)	5(2)	8(7)	..	..	..	..	..	26
Diphtheria	3(1)	5(3)	4(2)	..	5(5)	..	..	..	17
Dysentery (Bacillary)	..	..	..	4(4)	..	1	..	..	5
Encephalitis	..	1	..	..	..	..	..	..	1
Filariasis	..	..	..	..	..	..	..	..	..
Homologous Serum Jaundice	..	..	..	..	..	..	..	..	..
Hydatid	..	..	..	..	..	3(1)	..	..	3
Infective Hepatitis	39(13)	79(35)	..	12(7)	7(6)	1	..	..	138
Lead Poisoning	..	..	4	..	..	..	..	..	4
Leprosy	..	..	..	..	..	..	..	..	..
Leptospirosis	..	..	2	..	..	..	..	..	2
Malaria	..	..	..	..	..	..	..	..	..
Meningococcal Infection	2	2(1)	..	..	..	..	..	..	4
Ophthalmia	..	..	..	..	..	..	..	..	..
Ornithosis	..	1(1)	..	..	..	..	..	..	1
Paratyphoid	..	..	..	..	1(1)	..	..	..	1
Plague	..	..	..	..	..	..	..	..	..
Poliomyelitis	2	..	1	2(1)	..	..	..	..	5
Puerperal Fever	..	..	1(1)	..	..	..	..	..	1
Rubella	..	32(25)	..	9(4)	3(3)	..	..	..	44
Salmonella Infection	..	..	..	1(1)	..	..	..	..	1
Scarlet Fever	15(8)	18(8)	27(14)	3(1)	1(1)	..	..	..	64
Smallpox	..	..	..	..	..	..	..	..	..
Tetanus	..	..	3(2)	..	..	..	..	..	3
Trachoma	..	..	..	..	1	..	..	..	1
Trichinosis	..	..	..	..	..	..	..	..	..
Tuberculosis	41(29)	23(15)	6(3)	5(3)	7(7)	4(2)	1	..	87
Typhoid Fever	..	..	..	..	..	..	1	..	1
Typhus (Flea-, Mite- and Tick-borne)	..	..	..	..	..	..	..	..	..
Typhus (Louse-borne)	..	..	..	..	..	..	..	..	..
Yellow Fever	..	..	..	..	..	..	..	..	..

[1] Figures in parentheses are those for the metropolitan area.

The examination is reciprocal with the primary examinations for Fellowship of the Royal College of Surgeons of England, the Royal College of Surgeons of Edinburgh, the Royal College of Surgeons in Ireland and the Royal Faculty of Physicians and Surgeons of Glasgow.

Each candidate will be notified by post of the result at the termination of the examination.

The examination is open to graduates of not less than one year's standing of a medical school approved by the Council of the College for the purpose. Candidates must submit evidence of their qualification and of the date of acquirement thereof.

Forms of application for admission to the examination may be obtained from the Secretary, Royal Australasian College of Surgeons, Spring Street, Melbourne. The fee for admission, or readmission, to the examination is £15 15s. (Australian currency) (*plus* exchange on cheques drawn on banks outside Melbourne). The fee must be forwarded with the form of application so as to reach the Secretary at his office not later than January 26, 1956.

The College of Radiologists of Australasia.

EXAMINATIONS FOR MEMBERSHIP.

THE following candidates have been successful in the *August examinations of The College of Radiologists of* Australasia (Part II) for membership of the College: Dr. W. F. C. Hare (Victoria), Dr. F. B. Hatfield (New South Wales), Dr. E. G. H. Manchester (New South Wales), Dr. J. A. Bloomfield (Victoria).

Notice.

BRITISH MEDICAL ASSOCIATION, NEW SOUTH WALES BRANCH.

Country Branch Meeting.

AN ordinary meeting of the New South Wales Branch of the British Medical Association will be held at 2 p.m. on Saturday, October 29, 1955, at the Wagga Wagga Base Hospital. Papers will be presented on the following subjects: "Hand Injuries", Dr. P. H. Greenwell; "The Arthritides and Their Treatment", Dr. Selwyn G. Nelson. The Saturday evening will be left open for an informal discussion following dinner.

On Sunday morning, October 30, 1955, members of the Southern District Medical Association will show clinical cases at the Wagga Wagga Base Hospital.

Members intending to be present should make their own arrangements for accommodation. They should also notify Dr. J. L. Tunley, 52 Gurwood Street, Wagga Wagga, and advise him if they are to be accompanied by their wives.

Nominations and Elections.

The undermentioned have been elected as members of the New South Wales Branch of the British Medical Association: Destro, Nicholas, M.B., B.S., 1955 (Univ. Sydney); Musgrove, Peter Anderson, M.B., B.S., 1955 (Univ. Sydney); Muller, John Noel, M.B., B.S., 1954 (Univ. Sydney); Sproule, Brian Creighton, M.B., B.S., 1954 (Univ. Sydney); Symes, Robert Matthew, M.B., B.S., 1954 (Univ. Sydney); Cook, Warwick John, M.B., B.S., 1953 (Univ. Sydney); Fitzjohn, Jean Marie Lyell, M.B., B.S., 1939 (Univ. Sydney).

Medical Appointments.

Dr. E. F. Gartrell has been appointed Honorary Cardiologist to the Cardiac Clinic at the Royal Adelaide Hospital.

Dr. M. E. Walker has been appointed Honorary Clinical Assistant to the Female Sterility Clinic at the Royal Adelaide Hospital.

Dr. C. G. Wilson has been appointed Senior Surgical Registrar at the Royal Adelaide Hospital.

Dr. F. E. Welch has been appointed Honorary Gynæcologist to the Female Sterility Clinic at the Royal Adelaide Hospital.

Deaths.

THE following death has been announced:

CONNOR.—Joseph Ivan Connor, on September 7, 1955, at Melbourne.

Diary for the Month.

SEPT. 27.—New South Wales Branch, B.M.A.: Ethics Committee.
SEPT. 28.—*Victorian Branch, B.M.A.: Branch Meeting.*
SEPT. 29.—New South Wales Branch, B.M.A.: Branch Meeting.
SEPT. 30.—New South Wales Branch, B.M.A.: Annual Meeting of Delegates.
OCT. 4.—New South Wales Branch, B.M.A.: Council Quarterly.
OCT. 5.—Western Australian Branch, B.M.A.: Branch Council.
OCT. 5.—Victorian Branch, B.M.A.: Branch Meeting.

Medical Appointments: Important Notice.

MEDICAL PRACTITIONERS are requested not to apply for any appointment mentioned below without having first communicated with the Honorary Secretary of the Branch concerned, or with the Medical Secretary of the British Medical Association, Tavistock Square, London, W.C.1.

New South Wales Branch (Medical Secretary, 135 Macquarie Street, Sydney): All contract practice appointments in New South Wales.

Queensland Branch (Honorary Secretary, B.M.A. House, 225 Wickham Terrace, Brisbane, B17): Bundaberg Medical Institute. Members accepting LODGE appointments and those desiring to accept appointments to any COUNTRY HOSPITAL or position outside Australia are advised, in their own interests, to submit a copy of their Agreement to the Council before signing.

South Australian Branch (Honorary Secretary, 80 Brougham Place, North Adelaide): All contract practice appointments in South Australia.

Western Australian Branch (Honorary Secretary, 205 Saint George's Terrace, Perth): Norseman Hospital; all contract practice appointments in Western Australia. All government appointments with the exception of those of the Department of Public Health.

Editorial Notices.

MANUSCRIPTS forwarded to the office of this journal cannot under any circumstances be returned. Original articles forwarded for publication are understood to be offered to THE MEDICAL JOURNAL OF AUSTRALIA alone, unless the contrary be stated.

All communications should be addressed to the Editor, THE MEDICAL JOURNAL OF AUSTRALIA, The Printing House, Seamer Street, Glebe, New South Wales. (Telephones: MW 2651-2-3.)

Members and subscribers are requested to notify the Manager, THE MEDICAL JOURNAL OF AUSTRALIA, Seamer Street, Glebe, New South Wales, without delay, of any irregularity in the delivery of this journal. The management cannot accept any responsibility or recognize any claim arising out of non-receipt of journals unless such notification is received within one month.

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